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 or Not for 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 http://www.dot.il.gov/desenv/delett.html 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 <u>Timothy.Garman@illinois.gov.</u>

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 suer 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, <u>do not</u> 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 <u>Your bid will not be read if this is not completed.</u> 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 <u>signature and date must be original</u> for each letting. Do not staple the forms together. If you answered "NO" to all of the questions in Paragraph C (page 12), complete the first section (page 14) with your company information and then sign and date the Not Applicable statement on page 17.

Page 18 (Form B) - If you check "YES" to having other current or pending contracts it is acceptable to use the phrase, "See Affidavit of Availability on file". **Ownership Certification** (at the bottom of the page) - Check N/A if the Form A(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.

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

□ **Proposal Bid Bond** – (Insert after the proposal signature page) Submit your proposal Proposal Bid Bond (if applicable) using the current Proposal Bid Bond form provided in the proposal package. The Power of Attorney page should be stapled to the Proposal Bid Bond. If you are using an electronic bond, include your bid bond number on the Proposal Bid Bond and attach the Proof of Insurance printed from the Surety's Web Site.

Disadvantaged Business Utilization Plan and/or Good Faith Effort – The last items in your bid should be the DBE Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SBE 2025) and supporting paperwork. If you have documentation 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 Web Site. A link to the stream will be placed on the main page of the current letting on the day of the Letting. The stream will not begin until 10 AM. The actual reading of the bids does not begin until approximately 10:30 AM.

Following the Letting, the As-Read Tabulation of Bids will be posted by the end of the day. You will find the link on the main Web page for the current letting.

QUESTIONS: pre-letting up to execution of the contract

Contractor pre-qualification	
Small Business, Disadvantaged Business Enterprise (DBE)	
Contracts, Bids, Letting process or Internet downloads	
Estimates Unit.	
Aeronautics	
IDNR (Land Reclamation, Water Resources, Natural Resources)	

QUESTIONS: following contract execution

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

Proposal Submitted By

273

Name

Address

City

Letting June 13, 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

Illinois Department of Transportation

Springfield, Illinois 62764

Contract No. 63808 LAKE County Section 14-F3000-02-BT Route FAU 178 (Wilson Road) Project TE-00D1(956) District 1 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:

A Bid Bond is included.

A Cashier's Check or a Certified Check is included

An Annual Bid Bond is included or is on file with IDOT.

Prepared by

Checked by

(Printed by authority of the State of Illinois)

F

Page intentionally left blank



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of ______

Taxpayer Identification Number (Mandatory)

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

Contract No. 63808 LAKE County Section 14-F3000-02-BT Project TE-00D1(956) Route FAU 178 (Wilson Road) District 1 Construction Funds

- This project consists of the construction of a bike path under pass structure, earth excavation, construction of a multi-use path, pavement reconstruction, pavement removal, curb and gutter removal and replacement, pavement markings, PCC sidewalk removal and replacement, lighting and landscaping in Wilson Road, 1.2 miles North of IL Route 120.
- 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:

	Amount of	of Bid	Proposal <u>Guaranty</u>	An	nount c	of Bid	Proposal <u>Guaranty</u>
Up to		\$5,000	\$150	\$2,000,000	to	\$3,000,000	\$100,000
\$5,000	to	\$10,000	\$300	\$3,000,000	to	\$5,000,000	\$150,000
\$10,000	to	\$50,000	\$1,000	\$5,000,000	to	\$7,500,000	\$250,000
\$50,000	to	\$100,000	\$3,000	\$7,500,000	to	\$10,000,000	\$400,000
\$100,000	to	\$150,000	\$5,000	\$10,000,000	to	\$15,000,000	\$500,000
\$150,000	to	\$250,000	\$7,500	\$15,000,000	to	\$20,000,000	\$600,000
\$250,000	to	\$500,000	\$12,500	\$20,000,000	to	\$25,000,000	\$700,000
\$500,000	to	\$1,000,000	\$25,000	\$25,000,000	to	\$30,000,000	\$800,000
\$1,000,000	to	\$1,500,000	\$50,000	\$30,000,000	to	\$35,000,000	\$900,000
\$1,500,000	to	\$2,000,000	\$75,000	over		\$35,000,000	\$1,000,000

Bank cashier's checks or properly certified checks accompanying 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 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 to delay and other causes suffered by the State because of the failure to execute said contract and contract bond; otherwise, the bid bond will become void or the proposal guaranty check will be returned to the undersigned.

Attach Cashier's Check or Certified Check Here

In the event that one proposal guaranty check is intended to cover two or more bid proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual bid proposal. If the guaranty check is placed in another bid 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. **COMBINATION BIDS.** The undersigned bidder further agrees that if awarded the contract for the sections contained in the following combination, he/she will perform the work in accordance with the requirements of each individual contract comprising the combination bid specified in the schedule below, and that the combination bid shall be prorated against each section in proportion to the bid submitted for the same. If an error is found to exist in the gross sum bid for one or more of the individual sections included in a combination, the combination bid shall be corrected as provided in the specifications.

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

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

Schedule of Combination Bids

Combination		Combination B	id
No.	Sections Included in Combination	Dollars	Cents

- 7. SCHEDULE OF PRICES. The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices will govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
- 8. AUTHORITY TO DO BUSINESS IN ILLINOIS. Section 20-43 of the Illinois Procurement Code (the Code) (30 ILCS 500/20-43) provides that a person (other than an individual acting as a sole proprietor) must be a legal entity authorized to do business in the State of Illinois prior to submitting the bid.
- 9. EXECUTION OF CONTRACT: The Department of Transportation will, in accordance with the rules governing Department procurements, execute the contract and shall be the sole entity having the authority to accept performance and make payments under the contract. Execution of the contract by the Chief Procurement Officer (CPO) or the State Purchasing Officer (SPO) is for approval of the procurement process and execution of the contract by the Department. Neither the CPO nor the SPO shall be responsible for administration of the contract or determinations respecting performance or payment there under except as otherwise permitted in the Code.

10. The services of a subcontractor will be used.

Check box Yes Check box No

For known subcontractors with subcontracts with an annual value of more than \$50,000, the contract shall include their name, address, general type of work to be performed, and the dollar allocation for each subcontractor. (30 ILCS 500/20-120)

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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.
- IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE. . ო
- A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN. 4.

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, 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 or is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-14 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. No corporation shall be barred from contracting with any unit of section 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 Act.

J. Disclosure of Business Operations in Iran

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

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

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

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

Check the appropriate statement:

/___/ Company has no business operations in Iran to disclose.

/___/ Company has business operations in Iran as disclosed the attached document.

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

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

NA-FEDERAL

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

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

Sections 20-160 and 50-37 of the Code regulate political contributions from business entities and any affiliated entities or affiliated persons bidding on or contracting with the state. Generally under Section 50-37, any business entity, and any affiliated entity or affiliated person of the business entity, whose current year contracts with all state agencies exceed an awarded value of \$50,000, are prohibited from making any contributions to any political committees established to promote the candidacy of the officeholder responsible for the awarding of the contracts or any other declared candidate for that office for the duration of the term of office of the incumbent officeholder or a period 2 years after the termination of the contract, whichever is longer. Any business entity and affiliated persons whose state contracts in the current year do not exceed an awarded value of \$50,000, but whose aggregate pending bids and proposals on state contracts exceed \$50,000, either alone or in combination with contracts not exceeding \$50,000, are prohibited from making any political committee established to promote the candidacy of the officeholder responsible for making any political contributions to any political committee established to promote the candidacy of the officeholder 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:

Name and address of person:

All costs, fees, compensation, reimbursements and other remuneration paid to said person:

□ I acknowledge, 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 <u>NOT APPLICABLE STATEMENT</u> on Form A must be signed and dated by a person that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

- 1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO
- 2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES ____ 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		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

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

2. Disclosure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a)	State employment, currently or in the previous 3 years, including contractua	al employ	ment of s	services.
		Yes	No	

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

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

- If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive
 (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor? Yes ____ No ___
- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes No ___
- (b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

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

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

Yes ___ No ___

Yes No

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

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

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

(f) Relationship to anyone ho	olding appointive office o	currently or in the previous	; 2 years; s	oouse, father,	mother,
son, or daughter.			Yes	_No	

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

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

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.

Yes <u>No</u>

3. Communication Disclosure.

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

Name and address of person(s):

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

Name of person(s):

Nature of disclosure:

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.

Completed by:

Signature of Individual or Authorized Representative

Date

	NOT APPLICABLE STATEMENT	
	v, I have determined that no individuals associated with this equire the completion of this Form A.	organization meet
This Disclosure Form A	is submitted on behalf of the CONTRACTOR listed on the pr	evious 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 Form is required by the Section 50-35 of the Code (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for bids in excess of \$25,000, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

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

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

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

THE FOLLOWING STATEMENT MUST BE CHECKED

Signature of Authorized Representative	Date

OWNERSHIP CERTIFICATION

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

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

🗌 Yes 🗌 No	□ N/A (Form A disclosure(s) established 100% ownership)
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SPECIAL NOTICE TO CONTRACTORS

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

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

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



Contract No. 63808 LAKE County Section 14-F3000-02-BT Project TE-00D1(956) Route FAU 178 (Wilson Road) District 1 Construction Funds

PART I. IDENTIFICATION

Dept. Human Rights #

Duration of Project:

Name of Bidder:

PART II. WORKFORCE PROJECTION

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

		TOTA	AL Wo	rkforce	Projec	tion for	Contr	act						C	URRENT TO BE	-	S
				MIN	ORITY I	EMPLC	YEES	6		TRA	AINEES				TO CO		
JOB CATEGORIES		TAL DYEES		ACK	HISP			HER NOR.	APPF TIC			HE JOB			OTAL OYEES	MINO	
CATEGORIES	M	F	M	F	M	F	M	VOR. F	M	/ <u>E</u> S F	M	F	-	M	F	M	F
OFFICIALS (MANAGERS)				_				-		_							-
SUPERVISORS																	
FOREMEN																	
CLERICAL																	
EQUIPMENT OPERATORS																	
MECHANICS																	
TRUCK DRIVERS																	
IRONWORKERS																	
CARPENTERS																	
CEMENT MASONS																	
ELECTRICIANS																	
PIPEFITTERS, PLUMBERS																	
PAINTERS																	
LABORERS, SEMI-SKILLED																	
LABORERS, UNSKILLED																	
TOTAL																	
									_		Г	FOF	R DEI	PARTM	IENT USE	ILY	
EMPLOYEES		aining Pro TAL	ojectio	n for C	ontract		*^	THER									
EIVIPLOTEES								THER									

UTAL IT	aining Pro	ojectioi		ontract			
TO	TAL					*OT	HER
EMPLO	OYEES	BLA	٩CK	HISP	ANIC	MIN	JOR.
М	F	Μ	F	М	F	М	F
	TO EMPLO M	TOTAL EMPLOYEES M F	TOTAL EMPLOYEES BLA M F M	TOTAL EMPLOYEES BLACK M F M F	EMPLOYEES BLACK HISP M F M F M	TOTAL EMPLOYEES BLACK HISPANIC M F M F M F	TOTAL *OT EMPLOYEES BLACK HISPANIC MIN

*Other minorities are defined as Asians (A) or Native Americans (N).

Please specify race of each employee shown in Other Minorities column.

BC 1256 (Rev. 12/11/07)

Note: See instructions on page 2

Contract No. 63808 LAKE County Section 14-F3000-02-BT Project TE-00D1(956) Route FAU 178 (Wilson Road) District 1 Construction Funds

PART II. WORKFORCE PROJECTION - continued

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

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

office or base of operation is located.

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

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

PART III. AFFIRMATIVE ACTION PLAN

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

Company _____

Telephone Number _____

Address _____

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

BC-1256 (Rev. 12/11/07)

ADDITIONAL FEDERAL REQUIREMENTS

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

- A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.
- B. <u>CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY</u>:
 - 1. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES _____ NO _____
 - If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES _____ NO _____

Contract No. 63808 LAKE County Section 14-F3000-02-BT Project TE-00D1(956) Route FAU 178 (Wilson Road) District 1 Construction Funds

PROPOSAL SIGNATURE SHEET

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

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Business Address	
	Firm Name	
(IF A CO-PARTNERSHIP)		
		Name and Address of All Members of the Firm:
_		
	Corporate Name	
	Ву	
(IF A CORPORATION)		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	
(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)		Signature
	Corporate Name	
(IF A JOINT VENTURE)	Ву	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	
		Signature
	Business Address	



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

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

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that whereas, the PRINCIPAL may submit bid proposal(s) to the STATE OF ILLINOIS, acting through the Department of Transportation, for various improvements published in the Transportation Bulletin during the effective term indicated above.

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

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

In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer day of A.D., .		In TESTIMONY WHEREOF, the instrument to be signed by its of day of	ne said SURETY has caused this officer A.D., .	
day of	A.D.,	day of	^.U.,	
(Coi	mpany Name)	(Comp	any Name)	
Ву		Ву		
(S	ignature and Title)	(Signature	of Attorney-in-Fact)	
Notary for PRINCIPAL		Notary for SURETY		
STATE OF		STATE OF		
Signed and attested before me on (date)		Signed and attested before me on (date)		
by		by		
(Name	of Notary Public)		Notary Public)	
(Seal)		(Seal)		
	(Signature of Notary Public)		(Signature of Notary Public)	
	(Date Commission Expires)		(Date Commission Expires)	

BDE 356A (Rev. 1/21/14)

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

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.



Division of Highways Proposal Bid Bond

Item No.

Letting Date

KNOW ALL PERSONS BY THESE PRESENTS, That We

as PRINCIPAL, and

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

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

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

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

In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer		In TESTIMONY WHEREOF, the said SURETY has caused this instrument to be signed by its officer	
day of	A.D.,	day of A.D.,	
	(Company Name)	(Company Name)	
Ву		Ву	
	(Signature and Title)	(Signature of Attorney-in-Fact)	
Notary for PRINCIP	AL	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	
(N	lame of Notary Public)	(Name of Notary Public)	
(Seal)		(Seal)	
	(Signature of Notary Public)	(Signature of Notary Public)	
	(Date Commission Expires)	(Date Commission Expires)	
proposal the Princip		d form, the Principal may file an Electronic Bid Bond. By signing the 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.

Electronic Bid Bond ID #

Signature and Title



(1) Policy

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

(2) Obligation

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

(3) Project and Bid Identification

Complete the following information concerning the project and bid:

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

(4) Assurance

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

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

Disadvantaged Business Participation _____ percent

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

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

Disadvantaged Business Participation _____ percent

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

	Company	The "as read" Low Bidder is required to com	ply with the Special Provision.
Ву		Submit only one utilization plan for each pro submitted in accordance with the special pro	
Title		Bureau of Small Business Enterprises 2300 South Dirksen Parkway Springfield, Illinois 62764	Local Let Projects Submit forms to the Local Agency
Date			

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



DBE Participation Statement

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

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:

Please indicat	ie: J	I/V	Manufacturer	Supplier (60%)	Subcont	ractor	Trucking
Pay Item No.			Description		Quantity	Unit Price	Total
						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 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 Contractor 1 st Tier 2 nd Tier	Signature for DBE Firm1 st Tier2 nd Tier
Title	Title
Date	Date
Contact Person	Contact Person
Phone	Phone
Firm Name	Firm Name
Address	Address
City/State/Zip	City/State/Zip
	Ε
The Department of Typese dution is requesting disclosure of information that is reasonable to a	wC

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

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

Name:	
Address:	
Phone No.	

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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

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

Contract No. 63808 LAKE County Section 14-F3000-02-BT Project TE-00D1(956) Route FAU 178 (Wilson Road) District 1 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. Debt Delinguency

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, 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.

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

Name of Subcontracting Company	
Authorized Officer	Date

SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

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

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the subcontracting entity or its parent entity, whichever is less, unless the subcontractor is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form. **The current annual salary of the Governor is \$177,412.00**.

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

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

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

- 1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ____ NO____
- 2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES ____ NO____
- 3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES ____ NO ___

(Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)

4. Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ____ NO __

(Note: Only one set of forms needs to be completed <u>per person per subcontract</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 subcontractor must determine each individual in the subcontracting entity or the subcontracting entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is authorized to execute contracts for your organization. **Photocopied or stamped signatures are not acceptable**. The person signing can be, but does not have to be, the person for which the form is being completed. The subcontractor is responsible for the accuracy of any information provided.

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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

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

2. Disclosure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services.

Yes No ____

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

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

3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive
(i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor?

Yes No

- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ____No ___
- (b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years.

Yes <u>No</u>

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

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

Yes <u>No</u>

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

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

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

- (h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ____No ___
- (i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ____No ___
- (j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.

Yes <u>No</u>

3 Communication Disclosure.

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

Name and address of person(s): _____

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

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ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Subcontractor: Other Contracts & Financial Related Information Disclosure

ail Address	Fax Number (if available)
1	ail Address

Disclosure of the information contained in this Form is required by the Section 50-35 of the Code (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for subcontracts with a total value of \$50,000 or more, from subcontractors identified in Section 20-120 of the Code, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The SUBCONTRACTOR shall identify whether it has any pending contracts, subcontracts, including leases, bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ____No ____ If "No" is checked, the subcontractor only needs to complete the signature box on the bottom of this page.

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

THE FOLLOWING STATEMENT MUST BE CHECKED

Signature of Authorized Officer	Date

OWNERSHIP CERTIFICATION

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

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

🗌 Yes	🗌 No	□ N/A (Form A disclosure(s) established 100% ownership)
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Illinois Department of Transportation

NOTICE TO BIDDERS

- 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.mJune 13, 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. 63808 LAKE County Section 14-F3000-02-BT Project TE-00D1(956) Route FAU 178 (Wilson Road) District 1 Construction Funds

This project consists of the construction of a bike path under pass structure, earth excavation, construction of a multi-use path, pavement reconstruction, pavement removal, curb and gutter removal and replacement, pavement markings, PCC sidewalk removal and replacement, lighting and landscaping in Wilson Road, 1.2 miles North of IL Route 120.

- **3. INSTRUCTIONS TO BIDDERS**. (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.
 - (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS. This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the Illinois Department of Transportation

Ann L. Schneider, Secretary

CONTRACT 63808

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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13		Hot-Mix Asphalt Surface Correction (Eff. 11-1-87) (Rev. 1-1-09)	
14		Pavement and Shoulder Resurfacing (Eff. 2-1-00) (Rev. 1-1-09)	
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LR SD12 LR SD13		H	Required Cold Milled Surface Texture	Nov. 11, 1984 Nov. 1, 1987	Jan. 1, 2007 Jan. 1, 2007
LR SD406			RESCINDED	100.1, 1907	Jan. 1, 2007
LR 102-2			Bidding Requirements and Conditions for Contract Proposals	Jan. 1, 2001	Jan. 1, 2014
LR 105	163		Cooperation with Utilities	Jan. 1, 1999	Jan. 1, 2007
LR 107-2			Railroad Protective Liability Insurance for Local Lettings	Mar. 1, 2005	Jan. 1, 2006
LR 107-4	166	\boxtimes	Insurance	Feb. 1, 2007	Aug. 1, 2007
LR 107-7			Wages of Employees on Public Works	Jan. 1, 1999	Jan. 1, 2014
LR 108			Combination Bids	Jan. 1, 1994	Mar. 1, 2005
LR 109			Equipment Rental Rates	Jan. 1, 2012	
LR 212			Shaping Roadway	Aug. 1, 1969	Jan. 1, 2002
LR 355-1			Bituminous Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 355-2		Ц	Bituminous Stabilized Base Course, Plant Mix	Feb. 20, 1963	Jan. 1, 2007
LR 400-1		Ц	Bituminous Treated Earth Surface	Jan. 1, 2007	Apr. 1, 2012
LR 400-2			Bituminous Surface Plant Mix (Class B)	Jan. 1, 2008	
LR 400-3		Ц	Hot In-Place Recycling (HIR) – Surface Recycling	Jan. 1, 2012	
LR 400-4			Full-Depth Reclamation (FDR) with Emulsified Asphalt	Apr. 1, 2012	Jun. 1, 2012
LR 400-5 LR 400-6			Cold In-Place Recycling (CIR) With Emulsified Asphalt	Apr. 1, 2012	Jun. 1, 2012
LR 400-0 LR 400-7			Cold In Place Recycling (CIR) with Foamed Asphalt	June 1, 2012	
LR 400-7 LR 402		Η	Full-Depth Reclamation (FDR) with Foamed Asphalt Salt Stabilized Surface Course	June 1, 2012	
LR 402-1			Surface Profile Milling of Existing, Recycled or Reclaimed Flexible	Feb. 20, 1963	Jan. 1, 2007
LIX 400-1		ليسا	Pavement	Apr. 1, 2012	Jun. 1, 2012
LR 403-2			Bituminous Hot Mix Sand Seal Coat	Aug. 1, 1969	Jan. 1, 2007
LR 406			Filling HMA Core Holes with Non-shrink Grout	Jan. 1, 2008	, -
LR 420			PCC Pavement (Special)	May 12, 1964	Jan. 2, 2007
LR 442			Bituminous Patching Mixtures for Maintenance Use	Jan. 1, 2004	Jun. 1, 2007
LR 451			Crack Filling Bituminous Pavement with Fiber-Asphalt	Oct. 1, 1991	Jan. 1, 2007
LR 503-1			Furnishing Class SI Concrete	Oct. 1, 1973	Jan. 1, 2002
LR 503-2			Furnishing Class SI Concrete (Short Load)	Jan. 1, 1989	Jan. 1, 2002
LR 542		Ц	Pipe Culverts, Type (Furnished)	Sep. 1, 1964	Jan. 1, 2007
LR 663		Ц	Calcium Chloride Applied	Jun. 1, 1958	Jan. 1, 2007
LR 702			Construction and Maintenance Signs	Jan. 1, 2004	Jun. 1, 2007
LR 1000-1			Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with Emulsified Asphalt Mix Design Procedures	Apr. 1, 2012	Jun. 1, 2012
LR 1000-2			Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with	June 1, 2012	
LR 1004			Foamed Asphalt Mix Design Procedures	lan 4,0000	lan 4 0007
LR 1004 LR 1030			Coarse Aggregate for Bituminous Surface Treatment Growth Curve	Jan. 1, 2002	Jan. 1, 2007
LR 1030 LR 1032-1		H	Emulsified Asphalts	Mar. 1, 2008	Jan. 1, 2010
LR 1032-1			Road Mix or Traveling Plan Mix Equipment	Jan. 1, 2007	Feb. 7, 2008
LIXIIUZ			Add with of Travening Frantivity Equipment	Jan. 1, 2007	

BDE SPECIAL PROVISIONS For the April 25 and June 13, 2014 Lettings

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

<u>File Name</u>	<u>Pg.</u>		Special Provision Title	Effective	Revised
80240			Above Grade Inlet Protection	July 1, 2009	Jan. 1, 2012
80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
80274			Aggregate Subgrade Improvement	April 1, 2012	Jan. 1, 2013
80192			Automated Flagger Assistance Device	Jan. 1, 2008	0411. 1, 2010
80173	167	X	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2013
80241	101		Bridge Demolition Debris	July 1, 2009	Aug. 1, 2010
50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481		····-	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	
50531			Building Removal-Case IV (No Asbestos)		April 1, 2010
80292			Coarse Aggregate in Bridge Approach Slabs/Footings	Sept. 1, 1990	April 1, 2010
80310	170	X	Coated Galvanized Steel Conduit	April 1, 2012	April 1, 2013
80198	170	<u> </u>		Jan. 1, 2013	
			Completion Date (via calendar days)	April 1, 2008	
80199 * 80203			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
* 80293			Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤	April 1, 2012	April 1, 2014
* 80204			5 Feet		
* 80294		10105	Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of	April 1, 2012	April 1, 2014
00044	474		Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet		
80311	171	X	Concrete End Sections for Pipe Culverts	Jan. 1, 2013	
* 80334	173	X	Concrete Gutter, Curb, Median, and Paved Ditch	April 1, 2014	
80277	474	~	Concrete Mix Design – Department Provided	Jan. 1, 2012	Jan. 1, 2014
80261 * 80335	174	X	Construction Air Quality – Diesel Retrofit	June 1, 2010	Jan. 1, 2014
	177	X	Contract Claims	April 1, 2014	
80029	178	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Aug. 2, 2011
80265			Friction Aggregate	Jan. 1, 2011	
80229			Fuel Cost Adjustment	April 1, 2009	July 1, 2009
80329			Glare Screen	Jan. 1, 2014	
80303	188	X	Granular Materials	Nov. 1, 2012	
80304			Grooving for Recessed Pavement Markings	Nov. 1, 2012	Jan. 1, 2013
80246	189	Χ	Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2012
80322			Hot-Mix Asphalt – Mixture Design Composition and Volumetric	Nov 1, 2013	
			Requirements		
80323			Hot-Mix Asphalt – Mixture Design Verification and Production	Nov 1, 2013	
80315			Insertion Lining of Culverts	Jan. 1, 2013	Nov 1, 2013
* 80336			Longitudinal Joint and Crack Patching	April 1, 2014	r de na de contra de cos Successiones de la seconda de cos
* 80324	191	X	LRFD Pipe Culvert Burial Tables	Nov 1, 2013	April 1, 2014
80325	211	Х	LRFD Storm Sewer Burial Tables	Nov 1, 2013	initiation of the internet of the two-official internet.
80045			Material Transfer Device	June 15, 1999	Jan. 1, 2009
80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
* 80337	0.000		Paved Shoulder Removal	April 1, 2014	
80330	2099-AdupA (MA1-1.5		Pavement Marking for Bike Symbol	Jan. 1, 2014	
80298			Pavement Marking Tape Type IV	April 1, 2012	
80254			Pavement Patching	Jan. 1, 2010	
80331	221	X	Payrolls and Payroll Records	Jan. 1, 2014	
80332			Portland Cement Concrete – Curing of Abutments and Piers	Jan. 1, 2014	
80326	223	X	Portland Cement Concrete Equipment	Nov 1, 2013	
* 80338			Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	
80300	an a	, contraction of	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	
		L			

<u>File Name</u>	<u>Pg.</u>	Special Provision Title	Effective	Revised
80328	224	X Progress Payments	Nov. 2, 2013	
80281	225	X Quality Control/Quality Assurance of Concrete Mixes	Jan. 1, 2012	Jan. 1, 2014
34261		Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	******	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
* 80306		Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt	Nov. 1, 2012	April 1, 2014
		Shingles (RAS)		
80327	226	X Reinforcement bars	Nov 1, 2013	
80283	228	X Removal and Disposal of Regulated Substances	Jan. 1, 2012	Nov. 2, 2012
80319	232	X Removal and Disposal of Surplus Materials	Nov. 2, 2012	
80307	on an	Seeding	Nov. 1, 2012	
* 80339		Stabilized Subbase	April 1, 2014	
80127		Steel Cost Adjustment	April 2, 2004	April 1, 2009
80317		Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	
80301		Tracking the Use of Pesticides	Aug. 1, 2012	
80333		Traffic Control Setup and Removal Freeway/Expressway	Jan. 1, 2014	
20338	233	X Training Special Provisions	Oct. 15, 1975	
* 80318	236	X Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
80288		Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2013
80302	238	X Weekly DBE Trucking Reports	June 2, 2012	
80289		Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	239	X Working Days	Jan. 1, 2002	

The following special provisions are in the 2014 Supplemental Specifications and Recurring Special Provisions:

File Name	Special Provision Title	New Location	<u>Effective</u>	<u>Revised</u>
80309	Anchor Bolts	Articles 1006.09, 1070.01, and 1070.03	Jan. 1, 2013	
80276	Bridge Relief Joint Sealer	Article 503.19 and Sections 588 and 589	Jan. 1, 2012	Aug. 1, 2012
80312	Drain Pipe, Tile, Drainage Mat, and Wall Drain	Article 101.01, 1040.03, and 1040.04	Jan. 1, 2013	
80313	Fabric Bearing Pads	Article 1082.01	Jan. 1, 2013	
80169	High Tension Cable Median Barrier	Section 644 and Article 1106.02	Jan. 1, 2007	Jan. 1, 2013
80320	Liquidated Damages	Article 108.09	April 1, 2013	
80297	Modified Urethane Pavement Marking	Section 780, Articles 1095.09 and 1105.04	April 1, 2012	
80253	Moveable Traffic Barrier	Section 707 and Article 1106.02	Jan. 1, 2010	Jan. 1, 2013
80231	Pavement Marking Removal	Recurring CS #33	April 1, 2009	
80321	Pavement Removal	Article 440.07	April 1, 2013	
80022	Payments to Subcontractors	Article 109.11	June 1, 2000	Jan. 1, 2006
80316	Placing and Consolidating Concrete	Articles 503.06, 503.07, and 516.12	Jan. 1, 2013	
80278	Planting Woody Plants	Section 253 and Article 1081.01	Jan. 1, 2012	Aug. 1, 2012
80305	Polyurea Pavement Markings	Article 780.14	Nov. 1, 2012	Jan. 1, 2013
80279	Portland Cement Concrete	Sections 312, 503, 1003, 1004, 1019, and 1020	Jan. 1, 2012	Nov. 1, 2013
80218	Preventive Maintenance – Bituminous Surface Treatment	Recurring CS #34	Jan. 1, 2009	April 1, 2012
80219	Preventive Maintenance – Cape Seal	Recurring CS #35	Jan. 1, 2009	April 1, 2012
80220	Preventive Maintenance – Micro Surfacing	Recurring CS #36	Jan. 1, 2009	April 1, 2012
80221	Preventive Maintenance – Slurry Seal	Recurring CS #37	Jan. 1, 2009	April 1, 2012

<u>File Name</u>	Special Provision Title	New Location	Effective	Revised
80224	Restoring Bridge Approach Pavements Using High-	Recurring CS #39	Jan. 1, 2009	Jan. 1, 2012
	Density Foam	-	·	
80255	Stone Matrix Asphalt	Sections 406, 1003, 1004,	Jan. 1, 2010	Aug. 1, 2013
		1030, and 1011		-
80143	Subcontractor Mobilization Payments	Article 109.12	April 2, 2005	April 1, 2011
80308	Synthetic Fibers in Concrete Gutter, Curb, Median	Articles 606.02 and 606.11	Nov. 1, 2012	•
	and Paved Ditch			
80286	Temporary Erosion and Sediment Control	Articles 280.04 and 280.08	Jan. 1, 2012	
80225	Temporary Raised Pavement Marker	Recurring CS #38	Jan. 1, 2009	
80256	Temporary Water Filled Barrier	Section 708 and Article	Jan. 1, 2010	Jan. 1, 2013
		1106.02		
80273	Traffic Control Deficiency Deduction	Article 105.03	Aug. 1, 2011	
80270	Utility Coordination and Conflicts	Articles 105.07, 107.19,	April 1, 2011	Jan. 1, 2012
		107.31, 107.37, 107.38,	•	·
		107.39 and 107.40		

The following special provisions require additional information from the designer. The Special Provisions are:

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

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

GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET

Effective as of the: June 13, 2014 Letting

<u>Pg</u> #	V	File Name	Title	Effective	Revised
		GBSP 4	Polymer Modified Portland Cement Mortar	June 7, 1994	July 26, 2013
		GBSP 12	Drainage System	June 10, 1994	Jan 1, 2007
		GBSP 13	High-Load Multi-Rotational Bearings	Oct 13, 1988	Oct 30, 2012
		GBSP 14	Jack and Remove Existing Bearings	April 20, 1994	Jan 1, 2007
		GBSP 15	Three Sided Precast Concrete Structure	July 12, 1994	Oct 15, 2011
		GBSP 16	Jacking Existing Superstructure	Jan 11, 1993	Jan 1, 2007
		GBSP 17	Bonded Preformed Joint Seal	July 12, 1994	Jan 1, 2007
		GBSP 18	Modular Expansion Joint	May 19, 1994	April 18, 2014
		GBSP 21	Cleaning and Painting Contact Surface Areas of Existing Steel Structures	June 30, 2003	May 18, 2011
		GBSP 25	Cleaning and Painting Existing Steel Structures	Oct 2, 2001	April 19, 2012
		GBSP 26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	April 30, 2010
		GBSP 28	Deck Slab Repair	May 15, 1995	Oct 15, 2011
		GBSP 29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	Oct 30, 2012
		GBSP 30	Bridge Deck Latex Concrete Overlay	May 15, 1995	Jan 18, 2011
		GBSP 31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	Oct 30, 2012
		GBSP 32	Temporary Sheet Piling	Sept 2, 1994	Jan 31, 2012
		GBSP 33	Pedestrian Truss Superstructure	Jan 13, 1998	April 18, 2014
		GBSP 34	Concrete Wearing Surface	June 23, 1994	Feb 6, 2013
		GBSP 35	Silicone Bridge Joint Sealer	Aug 1, 1995	Oct 15, 2011
		GBSP 38	Mechanically Stabilized Earth Retaining Walls	Feb 3, 1999	April 18, 2014
		GBSP 42	Drilled Soldier Pile Retaining Wall	Sept 20, 2001	Jan 3, 2014
		GBSP 43	Driven Soldier Pile Retaining Wall	Nov 13, 2002	Jan 3, 2014
240	Х	GBSP 44	Temporary Soil Retention System	Dec 30, 2002	May 11, 2009
		GBSP 45	Bridge Deck Thin Polymer Overlay	May 7, 1997	Feb 6, 2013
		GBSP 46	Geotextile Retaining Walls	Sept 19, 2003	July 26, 2013
242	Х		Pipe Underdrain for Structures	May 17, 2000	Jan 22, 2010
-		GBSP 53	Structural Repair of Concrete	Mar 15, 2006	April 18, 2014
		GBSP 55	Erection of Curved Steel Structures	June 1, 2007	
		GBSP 56	Setting Piles in Rock	Nov 14, 1996	April 19, 2012
		GBSP 57	Temporary Mechanically Stabilized Earth Retaining Walls	Jan 6, 2003	April 18, 2014
		GBSP 59	Diamond Grinding and Surface Testing Bridge Sections	Dec 6, 2004	Jan 3, 2014
		GBSP 60	Containment and Disposal of Non-Lead Paint Cleaning Residues	Nov 25, 2004	Mar 6, 2009
		GBSP 61	Slipform Parapet	June 1, 2007	Aug 17, 2012
		GBSP 62	Concrete Deck Beams	June 13, 2008	Oct 9, 2009
		GBSP 64	Segmental Concrete Block Wall	Jan 7, 1999	Oct 30, 2012
		GBSP 65	Precast Modular Retaining Walls	Mar 19, 2001	Jan 3, 2014
		GBSP 67	Structural Assessment Reports for Contractor's Means and Methods	Mar 6, 2009	
		GBSP 70	Braced Excavation	Aug 9, 1995	May 18, 2011
		GBSP 71	Aggregate Column Ground Improvement	Jan 15, 2009	Oct 15, 2011

GBSP 72	Bridge Deck Fly Ash or GGBF Slag Concrete Overlay	Jan 18, 2011	Oct 15, 2011
GBSP 73	Cofferdams	Oct 15, 2011	
GBSP 74	Permanent Steel Sheet Piling (LRFD)	Jan 31, 2012	Aug 17, 2012
 GBSP 75	Bond Breaker for Prestressed Concrete Bulb-T Beams	April 19, 2012	
GBSP 76	Granular Backfill for Structures	April 19, 2012	Oct 30, 2012
GBSP 77	Weep Hole Drains for Abutments, Wingwalls, Retaining Walls And Culverts	April 19, 2012	Oct 22, 2013
GBSP 78	Bridge Deck Construction	Oct 22, 2013	April 18, 2014

LIST ANY ADDITIONAL SPECIAL PROVISIONS BELOW

The following Guide Bridge Special Provisions have been incorporated into the 2012 Standard Specifications:

File	Title	Std Spec
Name		Location
GBSP22	Cleaning and Painting New Metal Structures	506
GBSP36	Surface Preparation and Painting Req. for Weathering Steel	506
GBSP50	Removal of Existing Non-composite Bridge Decks	501
GBSP58	Mechanical Splicers	508
GBSP63	Demolition Plans for Removal of Existing Structures	501
GBSP68	Piling	512
GBSP69	Freeze-Thaw Aggregates for Concrete Superstructures Poured on Grade	1004

The following Guide Bridge Special Provisions have been discontinued or have been superseded:

File	Title	Disposition:
Name		
GBSP37	Underwater Structure Excavation Protection	Replaced by GBSP73
GBSP11	Permanent Steel Sheet Piling	Replaced by GBSP74
GBSP47	High Performance Concrete Structures	Discontinued
GBSP52	Porous Granular Embankment (Special)	Replaced by GBSP76
GBSP66	Wave Equation Analysis of Piles	Discontinued

Route: FAU 178 Wilson Road Underpass Section: 14-F3000-02-BT County: Lake Contract No. 63808

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 Route: FAU 178 Wilson Road Underpass; Section: 14-F3000-02-BT; Project Number: TE-00D1(956); County: Lake; and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

Route: FAU 178 Wilson Road Underpass Section: 14-F3000-02-BT County: Lake Contract No.: 63808

LOCATION OF PROJECT

Roadway improvements associated with this project begin at a point on the centerline of FAU Route 178 Wilson Road approximately 3,700 feet northwest of IL Route 120 and extends in a northerly direction in Lake County for a total net and gross length of 3,110.00 feet (0.59 miles).

The multi-use path improvements begin at a point approximately 1,650 feet southwest of the centerline of FAU Route 178 Wilson Road and continue to a point approximately 970 feet southeast of the centerline for a total net and gross length of 2,645.46 feet (0.50 miles).

Project total gross and net length of 5,755.46 feet (1.09 miles).

DESCRIPTION OF PROJECT

The work consists of connecting the existing Millennium Trail multi-use path across Wilson Road by constructing an underpass to cross Wilson Road.

The work consists of a proposed bike path underpass structure, earth excavation, construction of a multi-use path, pavement reconstruction, pavement removal, curb and gutter removal and replacement, pcc sidewalk removal and replacement, lighting, pavement markings, erosion control, landscaping and all incidental and collateral work necessary to complete the project as shown on the plans and as described herein.

MAINTENANCE OF ROADWAYS

Effective: September 30, 1985 Revised: November 1, 1996

Beginning on the date that work begins on this project, the Contractor shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work deemed necessary by the Engineer, but shall not include snow removal operations. Traffic control and protection for maintenance of roadways will be provided by the Contractor as required by the Engineer.

If items of work have not been provided in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection required by the Engineer, will be paid for in accordance with Article 109.04 of the Standard Specifications.

STATUS OF UTILITIES TO BE ADJUSTED

Effective: January 30, 1987 Revised: January 24, 2013

Utilities companies involved in this project have provided the following estimated durations:

Name of Utility	Туре	Location	Estimated Duration of Time for the Completion of Relocation or Adjustments
ComEd Ms. Terri Bleck 1500 Franklin Blvd. Libertyville, IL 60048 847-816-5239	Overhead Facilities	Along West Side of Wilson Road	
Nicor Gas Ms. Constance Lane 1844 Ferry Road Naperville, IL 60563 630-388-3830	Gas Main	Along West Side of Wilson Road	Relocation – April, 2014 to July, 2014 10 Days

The above represents the best information available to the Department and is included for the convenience of the bidder. The applicable portions of Articles 105.07 and 107.31 of the Standard Specifications shall apply.

In accordance with 605 ILCS 5/9-113 of the Illinois Compiled Statutes, utility companies have 90 days to complete the relocation of their facilities after receipt of written notice from the Department. The 90-day written notice will be sent to the utility companies after the following occurs:

- 1) Proposed right of way is clear for contract award.
- 2) Final plans have been sent to and received by the utility company.
- 3) Utility permit is received by the Department and the Department is ready to issue said permit.
- 4) If a permit has not been submitted, a 15 day letter is sent to the utility company notifying them they have 15 days to provide their permit application. After allowing 15 days for submission of the permit the 90 day notice is sent to the utility company.
- 5) Any time within the 90 day relocation period the utility company may request a waiver for additional time to complete their relocation. The Department has 10 days to review and respond to a waiver request.

TRAFFIC CONTROL PLAN

Effective: June 1, 2012

Traffic Control shall be according to the applicable sections of the "Standard Specifications", the "Supplemental Specifications", the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", the "Quality Standard for Work Zone Traffic Control Devices", any special details and Highway Standards as shown in the plans, and the Special Provisions contained herein, relating to traffic control.

Special attention is called to Article 105.03(b), 105.05, and 107.09, and to Sections 701, 704, and 782 of the "Standard Specifications" and the following Highway Standards, Details, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall contact the Engineer at least 72 hours in advance of beginning work.

<u>STANDARDS</u>: 701006-05, 701101-04, 701206-03, 701301-04, 701306-03, 701501-06, 701901-03, 704001-07, LC7202, LC7203, LC7800

DETAILS: STAGING PLAN, ARTERIAL ROAD INFORMATION SIGN (TC-22), DRIVEWAY ENTRANCE SIGNGING

<u>SPECIAL PROVISIONS:</u> MAINTENANCE OF ROADWAYS, TEMPORARY INFORMATION SIGNING, TRAFFIC CONTROL AND PROTECTION, LRS3, LRS4

TREE ROOT PRUNING

Effective: January 1, 2007

Description: This work shall consist of pruning existing tree roots prior to trenching or excavation operations.

General: The work shall be performed according to Article 201.06 of the "Standard Specifications" and the following:

Before any trenching or excavation in the area of a tree, tree roots shall be cut with appropriate root pruning equipment to a minimum of 24" deep. The cuts shall be made 6" to 12" closer to the tree than the construction limit. This allows for root regeneration (within the 6" to 12" area) during the construction period. Pruning shall not be done at the construction limit, since the cut surfaces of the roots will remain exposed resulting in root dieback.

Method of Measurement: Tree Root Pruning will be measured for payment as each per tree according to Article 201.10(d) of the "Standard Specifications".

Basis of Payment: This work will be paid for at the contract unit price per each for TREE ROOT PRUNING.

TREE REMOVAL

Effective: January 1, 2007 Revised: August 1, 2011

Description: This work shall consist of cutting, grubbing, removing and disposing of trees and stumps.

General: The work shall be performed according to Article 201.04 of the "Standard Specifications" and the following:

Cut trees and limbs shall be disposed of within five working days. The cut trees and limbs shall be disposed of according to Article 202.03 of the "Standard Specifications".

Method of Measurement: Tree Removal will be measured for payment according to Article 201.10(b) of the "Standard Specifications".

Basis of Payment: This work will be paid for at the contract unit price per unit diameter for TREE REMOVAL of the size range specified. The unit price shall include all equipment, materials and labor required to remove and dispose of designated trees and stumps.

REMOVAL AND DISPOSIAL OF SURPLUS, UNSTABLE, AND UNSUITABLE MATERIALS AND ORGANIC WASTE

Effective: February 18, 2013 Revised: January 15, 2014

Description: This work shall consist of the off-site disposal at pre-approved Clean Construction or Demolition Debris (CCDD) facilities of excess uncontaminated soil generated by Lake County Division of Transportation (LCDOT) contract construction projects.

Definitions:

Clean construction or demolition debris (CCDD): CCDD is uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, or reclaimed asphalt pavement generated from construction or demolition activities. CCDD material may include small incidental quantities of soil that are comingled as part of the removal process. When uncontaminated soil is mixed with any of these materials, the uncontaminated soil is also considered CCDD. Uncontaminated soil that is not mixed with other CCDD materials is not CCDD.

Uncontaminated Soil: What constitutes "uncontaminated soil" for purposes of CCDD and uncontaminated soil fill operations is defined in 35 III. Adm. Code 1100. Uncontaminated soil means soil that does not contain contaminants in concentrations that pose a threat to human health and safety and the environment.

General: CCDD that does not contain any uncontaminated soil may be disposed of at CCDD facilities without additional paperwork. CCDD containing uncontaminated soil from LCDOT construction sites may be disposed of at the facilities listed below.

LCDOT's Responsibility: LCDOT will collect and analyze soil samples for pH from the areas with no Potential Impacted Properties (PIPs), and complete the associated IEPA 662 form. The Contractor is relieved of the requirement to have the pH testing performed according to Article 202.03 as revised by the BDE special provision Removal and Disposal of Surplus Materials, included herein. For areas with PIPs, LCDOT will perform the applicable soil testing based on LCDOT's due diligence procedures, and complete the associated IEPA 663 forms. Signed IEPA forms 662 and/or 663 are included in the bid package.

Contractor's Responsibility: The Contractor is expected to use one or more of the County's pre-approved uncontaminated soil disposal facilities listed below. Should a Contractor elect to use an alternate facility for uncontaminated soil disposal, the Contractor shall be responsible for all costs associated with testing, trucking, and tipping fees for proper disposal of all accepted loads, and all costs associated with proper disposal of all rejected loads.

The Contractor shall stage and transport material to the pre-approved receiving facility and shall be responsible for coordination with such facilities on operating hours.

The Contractor shall submit a Material Disposal Plan a minimum of 14 days prior to beginning earthwork activities. The Material Disposal Plan shall detail the methods of removal and disposal of all un-contaminated soil and CCDD leaving the site, for review and approval by the Engineer.

In the event that a pre-approved disposal facility rejects the material, the Contractor shall return the material to the project site for stockpile at a location and manner designated by the Engineer according to the special provision for REJECTED LOAD TRANSPORTATION.

No soil testing shall be conducted by the Contractor with the exception of onsite photo ionization detectors (PID) screening (at the Contractor's option).

Method of Measurement: This work will not be measured for payment.

Basis for Payment: The off-site disposal of uncontaminated soil and/or CCDD, including transportation, facility disposal fees and all other work necessary, will not be paid for but shall be included in the contract unit price per cubic yard of EARTH EXCAVATION.

Pre-Approved Facilities for Receiving Uncontaminated Soil

Midwest Aggregates 28435 W. Route 173 Antioch, IL 60002 (847) 395-2595 Mr. Jim Mertes	Reliable Sand and Gravel Co., Inc. 2121 S River Road McHenry, IL 60051 (815) 385-5020 Mr. Don Roberts	47 Acres/Southwind Business Park 2250 Southwind Boulevard Bartlett, IL 60103 (630) 497-8700 Mr. William Haworth
Lake in the Hills CCDD Pingree Rd/Virginia Rd Lake in the Hills, IL 60156 (630) 497-8700 Mr. Michael Vondra	Reliable Lyons CCDD 4226 S Lawndale Avenue Lyons, IL 60534 (630) 497-8700 Mr. William Haworth	Blue Heron Business Park – Bartlett 23108 W Bartlett Road Bartlett, IL 60103 Mr. William Haworth
Petersen Sand & Gravel CCDD 914 W Route 120 Lakemoor, IL 60050 (847) 395-3313 Mr. Steve Thelen	Raymond Street – CCDD 1400 Route 25 South Elgin, IL 60177 (630) 497-8700 Mr. William Haworth	Gifford East – CCDD 1395 Gifford Road Elgin, IL 60120 Mr. William Haworth
Thelen Sand & Gravel 28955 E IL Route 173 Antioch, IL 60002 (847) 395-3313 Mr. Steve Thelen	Middle St – CCDD 1155 W Middle St South Elgin, IL 60177 (630) 497-8700 Mr. William Haworth	

and/or CCDD from LCDOT Projects

EARTH EXCAVATION

Effective: January 1, 2007 Revised: August 1, 2011

Description: This work shall consist of the excavation and transportation of suitable excavated material to embankment locations throughout the limits of the project. This work shall also consist of the excavation, transportation and disposal of excess and unsuitable materials.

General: This work shall conform to the requirements of Section 202 of the "Standard Specifications" and the following:

For this Project the Earth Excavation shall consist of:

- 1. Excavation to the subgrade elevation.
- 2. Excavation for topsoil placement.
- 3. The removal of bituminous material not included in any other pay item.
- 4. Undercutting, as determined by the Engineer to include:
 - a. Removal of existing topsoil under proposed embankment.
 - b. Removal of unsuitable material in wet areas.
- 5. Undercutting, based on the recommendations of the soil survey and report.
 - a. An estimated quantity of excavation for undercutting has been included in the quantity of Earth Excavation and is shown on the plans.
 - b. Undercutting may be employed only at the discretion of the Engineer after it has been determined that the provisions of Section 301 of the "Standard Specifications" will not yield sufficient results to allow the timely progress of the project.

Removal and disposal of unstable, unsuitable and/or excess material will not be paid for separately, but is included in the contract unit price for Earth Excavation. All unstable, unsuitable and/or excess material shall be disposed of outside the right-of-way according to Article 202.03 of the "Standard Specifications".

Earth moved more than once due to construction staging and/or procedures selected by the Contractor, will not be paid for separately, but shall be considered included in the unit cost of Earth Excavation.

A Soil Survey and Report:

☐ Was performed – A copy is available online with the project plans and contract specifications and it is available for inspection and review at LCDOT.
 ☐ Was not performed.

Method of Measurement: Earth Excavation will be measured in its original position and the volume in cubic yards computed by the method of average end areas.

Basis of Payment: This work will be paid for at the contract unit price per cubic yard for EARTH EXCAVATION. The unit price shall include all equipment and labor required to excavate, transport and distribute earth.

COARSE AGGREGATE FOR BACKFILL, TRENCH BACKFILL AND BEDDING (D-1)

Effective: November 1, 2011 Revised: November 1, 2013

This work shall be according to Section 1004.05 of the Standard Specifications except for the following:

Reclaimed Asphalt Pavement (RAP) maybe blended with gravel, crushed gravel, crushed stone crushed concrete, crushed slag, chats, crushed sand stone or wet bottom boiler slag. The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". The RAP shall be uniformly graded and shall pass the 1.0 in. (25 mm) screen. When RAP is blended with any of the coarse aggregate listed above, the blending shall be done mechanically with calibrated feeders. The feeders shall have an accuracy of \pm 2.0 percent of the actual quantity of material delivered. The final blended product shall not contain more than 40 percent by weight RAP.

The coarse aggregate listed above shall meet CA 6 and CA 10 gradations prior to being blended with the processed and uniformly graded RAP. Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

EXPLORATION TRENCH 52" DEPTH

Effective: January 1, 2007 Revised: August 1, 2011

Description: This work shall consist of constructing a trench for the purpose of locating existing tile lines, farm underdrains, or other underground appurtenances within the construction limits of the proposed improvement.

General: The work shall be performed according to Section 213 of the "Standard Specifications". The exploration trench(s) shall be constructed at a location(s) as directed by the Engineer.

The trench shall be deep enough to expose the underground line, and the width of the trench shall be sufficient to allow proper investigation to determine if the tile line needs to be replaced.

Method of Measurement: An estimated length of exploration trench is included in the summary of quantities to establish a unit price only. The exploration trench will be measured for payment in feet of actual trench constructed.

Basis of Payment: This work will be paid for at the contract unit price per foot for EXPLORATION TRENCH 52" DEPTH. Payment will be based on the actual length of trench explored without a change in unit price because of adjustment in plan quantities, and no extra compensation will be allowed for any delays, inconveniences or damage sustained by the Contractor in performing the work. The unit price shall include all equipment, materials and labor required to construct the trench.

TRENCH BACKFILL

Effective: January 1, 2007 Revised: August 1, 2011

Description: This work shall consist of furnishing and placing aggregate backfill in all trenches made in the subgrade of the proposed improvement, and all trenches where the inner edge of the trench is within two feet of the proposed edge of pavement, curb, gutter, curb and gutter, stabilized shoulder, and/or sidewalk.

Materials: The aggregate shall meet the requirements of Article 208.02 of the "Standard Specifications". A local material meeting the approval of the Engineer may be substituted.

General: The work shall be performed according to Section 208 of the "Standard Specifications".

Method of Measurement: Trench Backfill shall be furnished and placed for full width of the excavated trench. The length and depth of the trench backfill shall be measured in place in feet. The trench width used to calculate the quantity of Trench Backfill will be measured in feet but it shall be subject to the following maximum width:

The maximum pay width for backfilling storm sewer and culvert trenches shall be the outside diameter of the pipe plus 18" for trench depths up to five feet (no shoring required), or the outside diameter of the pipe plus 36" for trench depths over five feet (shoring required). Maximum Trench widths for round pipe up to 48" in diameter are included on the Lake County standard LC0020 shown on the plans.

Basis of Payment: This work will be paid for at the contract unit price per cubic yard for TRENCH BACKFILL. The unit price shall include all equipment, materials and labor required to furnish and place the trench backfill.

TOPSOIL FURNISH AND PLACE

Effective: January 1, 2007 Revised: October 17, 2013

Description: This work shall consist of furnishing, excavating, transporting and placing topsoil.

Materials: Topsoil (furnished from outside the right-of-way) shall meet the requirements of Article 1081.05(a) of the "Standard Specifications".

General: The work shall be performed according to Section 211 of the "Standard Specifications" and the following:

The work shall also comply with the "Illinois State Agency Historic Resources Preservation Act" (Public Act 86-707, effective January 1, 1990). Under this Act:

- 1. The Contractor shall complete an Environmental Survey Request Form for Borrow/Waste/Use Areas (BDE form 2289 4/15/10 included herein), along with all required attachments, and submit them to the Engineer at the earliest possible date.
- 2. The Engineer shall submit the Environmental Survey Request to the Illinois Department of Transportation for review and approval. Any costs incurred associated with said review and approval will be borne by the Contractor.
- 3. The Contractor shall not begin work on any Borrow/Use areas until the Environmental Survey Request has been approved.

The Contractor shall collect one representative soil sample from the proposed growing surface which shall be analyzed by an agricultural laboratory approved by the Engineer. The Contractor shall submit the proposed laboratory name and address to the Engineer at the pre-construction conference. The soils analysis shall include (but is not limited to) the recommended application rates of nitrogen and potassium fertilizer nutrients.

Plan quantities reflect an 8" thick topsoil placement in all disturbed areas.

Method of Measurement: Topsoil Furnish and Place will be measured for payment in square yards according to Article 211.07 of the "Standard Specifications".

Basis of Payment: This work will be paid for at the contract unit price per square yard for TOPSOIL FURNISH AND PLACE, of the thickness specified. The cost of the soil analysis will not be paid for separately, but will be included in the cost of TOPSOIL FURNISH AND PLACE, of the thickness specified. The unit price shall include all equipment, materials and labor required to furnish and place the topsoil. No additional compensation will be allowed for topsoil furnished from locations outside the ROW.

PERIMETER EROSION BARRIER

Effective: January 1, 2007 Revised: August 1, 2011

Description: This work shall consist of constructing, removing and disposing of perimeter erosion barrier as part of the project's temporary erosion control system.

General: The work shall be performed according to Section 280 of the "Standard Specifications" and the following:

The perimeter erosion barrier shall be limited to temporary silt filter fence meeting the requirements of AASHTO Standard M 288-00. This specification is applicable to the use of a geotextile as a vertical, permeable interceptor designed to remove suspended soil from overland water flow. The function of a temporary silt fence is to filter and allow settlement of soil particles from sediment-laden water. The purpose is to prevent the eroded soil from being transported off the construction site by water runoff.

All removed materials shall be disposed of outside the right-of-way according to Article 202.03 of the "Standard Specifications".

Materials:

Geotextile Requirements: The geotextile used for the temporary silt fence shall be classified as supported (with a wire or polymeric mesh backing) or unsupported (no backing). The temporary silt fence geotextile shall meet the requirements of Table 6 included below. All numeric values except Apparent Opening Size (AOS) represent Minimum Average Roll Values (MARV as defined in ASTM D4439). The values for AOS are the Maximum Average Roll Values.

Table 6 – Temporary Silt Fence Requirements	
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			Unsupported Silt Fence		
Requirements	Test Methods	Wire Backed Supported Silt Fence ^a	Geotextile Elongation >=50% ^b	Geotextile Elongation <50% ^b	
Maximum Post Spacing		4 feet	4 feet	6 feet	
Grab Strength	ASTM D 4632				
Machine direction		90 lbs	124 lbs	124 lbs	
X-Machine direction		90 lbs	100 lbs	100lbs	
Permittivity ^c	ASTM D 4491	0.05 sec ⁻¹	0.05 sec ⁻¹	0.05 sec -1	
Apparent Opening Size	ASTM D 4751	0.024in maximum average roll value			
Ultraviolet stability (retained strength)	ASTM D 4355	70% after 500 hours of exposure			

Notes:

- a) Silt fence support shall consist of 14-guage steel wire with a mesh backing of 6" x 6" or prefabricated polymeric mesh of equivalent strength.
- b) As measured according to ASTM D 4632.
- c) These default filtration property values are based on empirical evidence with a variety of sediments. For environmentally sensitive areas, a review of previous experience and/or site or regionally specific geotextile tests should be performed by the agency to confirm suitability of these requirements.

Support Posts: The support posts may be composed of wood, steel or a synthetic material. The posts shall be a minimum length of 3 feet plus the buried depth. They shall have sufficient strength to resist damage during installation and to the support the applied loads due to material build up behind the silt fence.

1) Hardwood posts shall be a minimum of 1.2" x 1.2"

- 2) No. 2 southern pine posts shall be a minimum of 2.6" x 2.6"
- 3) Steel posts may be U, T, L, or C shape, weighing 1.3 lbs per foot.

Fence Support: The wire or polymer support fence shall be at least 30" high and strong enough to support the applied loads. Polymer support fences shall meet the same ultraviolet degradation requirements as the geotextile material (see table 6).

The wire support fence shall:

- > Be a minimum of 14-gauge.
- > Have a minimum of six horizontal wires.
- > The maximum vertical wire spacing shall be 6".

Construction:

The silt fence shall be installed with a minimum height above ground of 30". The geotextile at the bottom of the fence shall be buried, in a "J" configuration to a minimum depth of 6", in a trench so that no flow can pass under the silt fence. The trench shall be backfilled and the soil compacted over the geotextile.

The geotextile shall be spliced together with a sewn seam or two sections of fence may be overlapped instead. The sewn seam shall be positioned only at a support post.

The Contractor must demonstrate to the satisfaction of the Engineer that the geotextile can withstand the anticipated sediment loading.

The posts shall be placed at the spacing shown on the project plans. The posts shall be driven or placed a minimum of 20" into the ground. The depth shall be increased to 24" if the fence is placed on a slope of 3:1 or greater. If the 20" depth is impossible to obtain, the posts shall be adequately secured to prevent overturning of the fence due to sediment loading.

The support fence shall be securely fastened to the upslope side of the fence post. The support fence shall extend from the ground surface to the top of the geotextile.

When un-supported fence is used, the geotextile shall be securely fastened to the fence posts.

Field monitoring shall be performed to verify that the placement of an armor system does not damage the geotextile.

Silt fences should be continuous and transverse to the flow. The silt fence should follow the contours of the site as closely as possible. The fence shall also be placed such that run off cannot flow around the end(s) of the fence.

The silt fence should be located so that the drainage area is limited to an area equivalent to 1000 square feet for each 10 feet of fence length. Caution should be used where the site slope is greater than 1:1, and/or water flow rates exceed 0.1 cubic feet per second for each 10 feet of fence length.

Maintenance:

The Contractor shall inspect all temporary silt fences immediately after each rainfall and at least daily during prolonged rainfall. The Contractor shall immediately correct any deficiencies.

The Contractor shall also make a daily review of the location of silt fences in areas where construction activities have altered the natural contour and drainage runoff to ensure that the silt fences area properly located for effectiveness. Where deficiencies exist as determined by the Engineer, additional silt fence shall be installed as directed by the Engineer.

Damaged or otherwise ineffective silt fences shall be repaired or replaced promptly.

Sediment deposits shall either be removed when the deposit reaches half the height of the fence or a second silt fence shall be installed as directed by the Engineer.

The silt fence shall remain in place until the Engineer directs it to be removed. After the fence removal, the Contractor shall remove and dispose of any excess sediment accumulations, dress the area to give it a pleasing appearance, and cover with vegetation all bare areas according to the contract requirements.

The removed silt fence may be used at other locations provided the geotextile and other material requirements continue to be met to the satisfaction of the Engineer.

Method of Measurement: This work will be measured for payment in place in feet.

Basis of Payment: This work will be paid for at the contract unit price per foot for PERIMETER EROSION BARRIER. The unit price shall include all work and materials necessary to properly install the barrier and to remove and dispose of the used materials at the completion of the project. Maintenance requirements shall be included and paid for under the special provision for PERIMETER EROSION BARRIER.

EROSION CONTROL BLANKET

Add the following to Article 251.04 of the Standard Specifications:

"Erosion control blanket shall be

- North American Green S75BN
- •Rolanka BioD Straw Premier Fibre-net
- •American Excelsior Single Net

All other requirements of Section 251 of the Standard Specification shall apply.

TEMPORARY DITCH CHECKS

Description: This work shall consist of constructing, maintaining, and removing temporary ditch checks.

General: The work shall be performed according to Section 280 of the "Standard Specifications", LCDOT Standard Drawing LC2050 and the following:

The temporary ditch check shall be triangular shaped, urethane foam covered with a geotextile fabric. The temporary ditch check shall be installed on a geotextile fabric apron. The temporary ditch check shall have a triangle base 16" - 20" wide and a minimum triangle height of 8" - 10". The temporary ditch checks shall be installed at the locations specified on the Erosion Control Plan, and/or as directed by the Engineer. The temporary ditch check installation shall be according to the detail shown on the plans and the manufacturer's recommendations.

The geotextile fabric shall conform to Article 1080.05 of the "Standard Specifications", for Geotechnical Fabric for French Drains.

The temporary ditch checks shall remain in place until just before placing the final landscaping in the ditch area. The Contractor shall not remove the temporary ditch checks if it is raining and/or rain is in the immediate forecast.

The ditch checks shall become the property of the Contractor upon their removal.

Method of Measurement: Temporary Ditch Checks will be measured in place and the length calculated in feet for each ditch check section actually installed.

Basis of Payment: This work will be paid for at the contract unit price per foot for TEMPORARY DITCH CHECKS. The unit price shall include all labor, equipment and materials necessary for their installation and removal.

INLET AND PIPE PROTECTION

Remove all reference to hay bales within Article 280.04 of the Standard Specifications:

Inlet and pipe protection shall be constructed with silt filter fence or inlet filters.

All other requirements of Section 280 of the Standard Specification shall apply.

AGGREGATE SUBGRADE IMPROVEMENT

Effective: January 1, 2007 Revised: February 1, 2013

Description: This work shall consist of furnishing and constructing a 12" thick aggregate subgrade on a prepared subbase. The subgrade shall be placed in 2 lifts.

Materials: The aggregate in the first lift shall be a porous granular embankment meeting the requirements of Article 1004.05 of the "Standard Specifications" except as follows:

1.	Crushed	Stone,	Crushed	Blast	Furnace	Slag,	or	Crushed	Concrete	meeting	the
require	ements of t	the follow	wing table	will be	permitted	•				-	

Sieve Size	Percent Passing	
8"	100	
6"	97 +/- 3	
4"	90+/- 10	
2"	45 +/- 25	
#4	20+/-20	
#200	5 +/- 5	

2. Crushed Gravel meeting the requirements of the following table will be permitted.

Sieve Size	Percent Passing		
8"	100		
6"	97 +/- 3		
4"	90+/- 10		
2"	55 +/- 25		
#4	30 +/- 20		
#200	5 +/- 5		

3. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with the above aggregate materials but shall not exceed 40 percent of the total product. The RAP shall have a top size of 4" and be well graded.

Steel slag and other expansive materials will not be permitted.

Crushed Gravel shall be defined as meeting a target of 97% with +/-3% variance for one-face or more crushed according to Crushed Particle Content: ASTM D 5821 (Illinois Modified).

The aggregate in the second lift shall be a capping aggregate. The material shall be limited to the following:

1. Crushed Stone, Crushed Blast Furnace Slag, Crushed Concrete, and Crushed Gravel having a gradation CA 6 in accordance with the requirements of Article 1004.01 of the "Standard Specifications". Steel slag and other expansive materials will not be permitted.

2. Reclaimed asphalt pavement (RAP) meeting the requirements of Section 1031 of the "Standard Specifications" and the following:

- 100% passing the 3 inch sieve.
- Well graded down through fines.
- The RAP shall not contain steel slag or other expansive material. RAP proposed for use as a capping aggregate shall be tested by the Department to determine if it is expansive or not. Non-expansive RAP will be allowed for use in the capping aggregate.

Equipment: A vibratory roller meeting the requirements of Article 1101.01(g) of the "Standard Specifications" shall be used to roll each lift of material.

Construction Requirements: The first lift shall be 8" thick. The material shall be a porous granular embankment. The work shall be done according to the applicable portions of Section 207 of the "Standard Specifications". The second lift shall be a 4" (nominal) thick capping aggregate. The work shall be done according to the applicable portions of Section 351 of the "Standard Specifications".

A vibratory roller shall be used to roll each lift of material to obtain the desired keying or interlock and necessary compaction. The Engineer will verify that adequate keying has been obtained.

All aggregate 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.

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.

Method of Measurement: Aggregate Subgrade Improvement 12" will be measured for payment in square yards according to Article 311.08(b) of the "Standard Specifications".

Basis of Payment: This work will be paid for at the contract unit price per square yard for AGGREGATE SUBGRADE IMPROVEMENT 12". The unit price shall include all equipment, materials and labor required to furnish and place both lifts.

AGGREGATE BASE COURSE, TYPE B

Effective: December 14, 2012

Description: This work shall consist of furnishing and placing aggregate base course material on a prepared subgrade or subbase.

Materials: The aggregate shall meet the requirements of Article 1004.04 of the "Standard Specifications" except that:

The aggregate material shall be limited to crushed gravel, crushed stone or crushed concrete.

The plasticity index requirements will be waived.

General: The work shall be performed according to Section 351 of the "Standard Specifications".

Method of Measurement: Aggregate Base Course, Type B will be measured for payment in tons according to Article 311.08(b) of the "Standard Specifications". The following excess moisture content correction will apply to Aggregate Base Course, Type B:

When the unit of measurement for the aggregate is tons, the aggregate may be weighed in trucks or freight cars. The Contractor shall furnish or arrange for the use of scales of a type approved by the Engineer. If, at the time the Type B aggregate is weighed, it contains more than six percent of absorbed and free moisture by weight, a deduction for the amount of moisture in excess of this amount will be made in determining the pay quantity. Any aggregate that has been stockpiled will be weighed at the time it is incorporated into the work.

Basis of Payment: This work will be paid for at the contract unit price per cubic yard for AGGREGATE BASE COURSE, TYPE B. The unit price shall include all equipment, materials and labor required to furnish, weigh and place the base course.

AGGREGATE BASE COURSE, TYPE B 6"

Effective: December 14, 2012

Description: This work shall consist of furnishing and placing aggregate base course material on a prepared subgrade or subbase.

Materials: The aggregate shall meet the requirements of Article 1004.04 of the "Standard Specifications" except that:

The aggregate material shall be limited to crushed gravel, crushed stone or crushed concrete.

The plasticity index requirements will be waived.

General: The work shall be performed according to Section 351 of the "Standard Specifications".

Method of Measurement: Aggregate Base Course, Type B will be measured for payment in square yards of the thickness specified according to Article 311.08(b) of the "Standard Specifications".

Basis of Payment: This work will be paid for at the contract unit price per square yard for AGGREGATE BASE COURSE, TYPE B of the depth specified. The unit price shall include all equipment, materials and labor required to furnish and place the base course.

AGGREGATE FOR TEMPORARY ACCESS

Effective: January 1, 2007 Revised: August 1, 2011 **Description:** This work shall consist of furnishing and constructing temporary aggregate driveways and roads to maintain ingress and egress to all abutting properties during construction operations.

Materials: The aggregate shall meet the requirements of Article 1004.04 of the "Standard Specifications" except that:

The aggregate material shall be limited to crushed gravel, crushed stone or crushed concrete. The plasticity index requirements and the requirement to add water at the central mixing plant will be waived.

General: The work shall be performed according to Article 402.10 of the "Standard Specifications" and the following:

Each temporary access shall be constructed to dimensions determined by the Engineer.

After the temporary aggregate access has served its purpose, the aggregate shall be removed. Suitable aggregate may be utilized for another purpose, such as embankment construction or driveway apron construction, with the approval of the Engineer,.

Aggregate not reused, shall be removed and disposed of outside the right-of-way according to Article 202.03 of the "Standard Specifications".

Method of Measurement: Aggregate for Temporary Access will be measured for payment in tons according to Article 311.08(b) of the "Standard Specifications". Measurement will be made for the initial use of the aggregate only, regardless of the number of times the aggregate is moved and/or reused.

Basis of Payment: This work will be paid for at the contract unit price per ton for AGGREGATE FOR TEMPORARY ACCESS. The unit price shall include all equipment, materials and labor required to furnish, transport, place, maintain and remove the aggregate.

PROTECTIVE COAT

Effective: January 1, 2007 Revised: August 1, 2011

Description: This work shall consist of applying a protective coat to exposed concrete surfaces.

Materials: The protective coat shall meet the requirements of Article 1023.01 of the "Standard Specifications".

General: The work shall be performed according to Article 420.18 of the "Standard Specifications" except that:

The protective coat shall be applied to the exposed surfaces of all concrete pavements and appurtenances regardless of the calendar date limitations contained in the first paragraph of Article 420.18 of the "Standard Specifications".

Method of Measurement: The exposed surfaces of all concrete pavements and appurtenances will be measured in place and the area computed in square yards.

Basis of Payment: This work will be paid for at the contract unit price per square yard for PROTECTIVE COAT. The unit price shall include all materials, equipment and labor required for two applications of protective coat to exposed surfaces of concrete pavements and appurtenances. The unit price shall include both applications with no additional compensation for the second coat.

DETECTABLE WARNINGS

Description: This work shall consist of furnishing and installing detectable warnings in accessibility ramps.

Materials: The detectable warnings shall be cast iron panels of the sizes shown on the plans and shall meet the following material specification:

The detectable warning plate shall be constructed of gray iron meeting the requirements of Article 1006.14 of the "Standard Specifications" and ASTM A48, CLASS 35B; or cast ductile iron meeting the requirements of Article 1006.15 of the "Standard Specifications".

The coating system shall consist of a rust inhibiting epoxy primer and a finish coat.

The epoxy primer shall have the following properties:

Test Method	Performance
ASTM D1735	1000 Hours Minimum
ASTM D870	250 Hours Minimum
ASTM B117	1000 Hours Minimum
	ASTM D1735 ASTM D870

Cold Rolled Steel Lab Panels

The finish coat shall be a powder coat and shall have the following properties:

Property	Test Method	Performance
Color	· · · · · · · · · · · · · · · · · · ·	Federal Yellow
Corrosion Resistance (Salt Spray)	ASTM B117	1000 Hours Minimum
	Rolled Steel Lab Papel	

Cold Rolled Steel Lab Panels

General: The installation of detectable warnings shall meet the requirements of Article 424.09 of the "Standard Specifications". Grey iron plates shall be installed in concrete accessibility ramps only. Ductile iron plates may be installed in either concrete or hot-mix asphalt (HMA) accessibility ramps.

Method of Measurement: This work will be measured for payment in place installed, in square feet. The concrete area under the detectable warnings will be measured for payment as PORTLAND CEMENT CONCRETE SIDEWALK of the thickness specified, with no deductions made for the detectable warnings panels located within the ramp.

Basis of Payment: This work will be paid for at the contract unit price per square foot of DETECTABLE WARNINGS. The unit price shall include all equipment, materials and labor required to install the panels.

HOT-MIX ASPHALT SURFACE REMOVAL

Effective: January 1, 2007 Revised: August 1, 2011

Description: This work shall consist of removing the existing hot-mix asphalt (HMA) surface to a depth specified on the plans with a self propelled milling machine.

General: The work shall be performed according to Section 440 of the "Standard Specifications" and the following:

If the milling machine cuts too deep or tears out areas of the existing pavement which were not designated for removal, the holes shall be filled with leveling binder at the Contractor's expense.

Temporary ramps at butt joints shall be provided according to Article 406.08 of the "Standard Specifications". Temporary ramps will not be paid for separately but shall be included in the contract unit bid price for the hot-mix asphalt surface removal, of the depth specified.

Penalty – Failure by the Contractor to provide the temporary bituminous ramp shall be grounds for assessment of a penalty of **\$100.00** per day, per ramp location, for each calendar day thereafter that such facility remains incomplete, after written notification from the Engineer. Such penalty shall be deducted from monies due or to become due to the Contractor under the Contract.

Method of Measurement: Hot-Mix Asphalt Surface Removal will be measured for payment in place and the area computed in square yards for each specified increment thickness of material removed.

Basis of Payment: This work will be paid for at the contract unit price per square yard for HOT-MIX ASPHALT SURFACE REMOVAL of the depth specified. The unit price shall include all equipment, materials, and labor required to remove the HMA surface.

AGGREGATE SHOULDERS, TYPE B

Effective: December 14, 2012

Description: This work shall consist of furnishing, placing, shaping, and compacting aggregate on a prepared subgrade adjacent to the edges of the completed pavement structure or stabilized shoulder.

Materials: The aggregate shall meet the requirements of Article 1004.04 of the "Standard Specifications" except that:

The aggregate material shall be limited to crushed gravel or crushed stone.

The plasticity index requirements will be waived.

General: The work shall be performed according to Section 481 of the "Standard Specifications".

Method of Measurement: Aggregate Shoulders, Type B will be measured for payment in tons according to Article 311.08(b) of the "Standard Specifications" except that payment will not be made for aggregate outside the plan width. The following excess moisture content correction will apply to Aggregate Shoulders, Type B:

When the unit of measurement for the aggregate is tons, the aggregate may be weighed in trucks or freight cars. The Contractor shall furnish or arrange for the use of scales of a type approved by the Engineer. If, at the time the Type B aggregate is weighed, it contains more than six percent of absorbed and free moisture by weight, a deduction for the amount of moisture in excess of this amount will be made in determining the pay quantity. Any aggregate that has been stockpiled will be weighed at the time it is incorporated into the work.

Basis of Payment: This work will be paid for at the contract unit price per square yard for AGGREGATE SHOULDERS, TYPE B of the thickness specified. The unit price shall include all equipment, materials and labor required to furnish, weigh and place the aggregate shoulder.

HOT-MIX ASPHALT – PRIME COAT (D-1)

Effective: February 19, 2013 Revised: April 1, 2014

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 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 HMA Bases	SS-1, SS-1h, SS-1hP, SS-1vh, CSS-1, CSS-1h, CSS-1hP, HFE-90, RC-70	
Prime Coat on Aggregate Bases	MC-30, PEP"	

Add the following to Article 406.03 of the Standard Specifications:

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 to remove all large particles and air blasting to remove dust. As an alternate to air blasting, vacuum sweeping may be used to accomplish the dust removal. Vacuum sweeping shall be accomplished with a regenerative air vacuum sweeper. 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)
Milled HMA, Aged Non-Milled HMA, Milled Concrete,	0.05 (0.244)
Non-Milled Concrete & Tined Concrete	
Fog Coat between HMA Lifts, IL-4.75 & Brick	0.025 (0.122)

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 ± 0.01 (1.21 kg/sq m ± 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 residual asphalt binder rate will be verified a minimum of once per type of surface to be primed as specified herein for which at least 2,000 tons of HMA will be placed. The test will be 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 last sentence of the first paragraph of 406.13(b) to read:

"Water added to emulsified asphalt at the source as allowed in article 406.02 will not be included in the quantities measured for payment."

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 and the second paragraph of Article 407.12 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 407.06(b) of the Standard Specifications to read:

"A bituminous prime coat shall be applied between each lift of HMA according to Article 406.05(b)."

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 an emulsion or cutback is used for prime coat, the percentage of asphalt residue of the actual certified product shall be shown on the producer's bill of lading or attached certificate of analysis. If the producer adds extra water to an emulsion at the request of the purchaser, the amount of water shall also 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:

	400 400	
1 55-11/1	160 - 180	70 80"
	100 - 100	1 70-00 1
· · · · · · · · · · · · · · · · · · ·		

Add the following to Article 1032.06 of the Standard Specifications:

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

F	Requiremen	ts for SS-1vh	
Test		SPEC	AASHTO Test Method
Saybolt Viscosity @ 25C,	SFS	20-200	T 72
Storage Stability, 24hr.,	%	1 max.	Т 59
Residue by Evaporation,	%	50 min.	T 59
Sieve Test,	%	0.3 max.	T 59
Tests	on Residue	from Evapora	ation
Penetration @25°C, 100g., 5 s	ec., dmm	20 max.	T 49
Softening Point,	O°	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-90, SS-1hP,CSS-1hP, SS-1vh	Prime or fog seal
PEP	Bituminous surface treatment prime
RS-2, HFE-90, HFE-150, HFE- 300, CRSP, HFP, CRS-2, HFRS-2	Bituminous surface treatment
CSS-1h Latex Modified	Microsurfacing"

Add the following to Article 1101 of the Standard Specifications:

"1101.19 Regenerative Air Vacuum Sweeper. The regenerative air vacuum sweeper shall blast re-circulated, filtered air through a vacuum head having a minimum width of 6.0 feet at a minimum rate of 20,000 cubic feet per minute."

BITUMINOUS MATERIALS (PRIME COAT)

Description: This work shall consist of furnishing and placing a prime coat on a prepared base or hot-mix asphalt layer.

Materials: The bituminous materials shall meet the requirements of Section 1032 of the "Standard Specifications" except that the material shall be limited as follows:

Emulsified asphalt will only be allowed between May 15th and September 1st. RC-70 asphalt shall be used in lieu of emulsified asphalt on or before May 15th, and on or after September 1st.

On days between May 15th and September 1st, when the air temperature is in question, the exact type of priming asphalt shall be determined by the Engineer.

General: The work shall be performed according to Article 406.05(b) of the "Standard Specifications" and the following:

The Prime Coat material shall be SS-1 on hot-mix asphalt surfaces and MC30 on aggregate surfaces.

The Contractor shall erect, to the Engineer's satisfaction, 36 inch (minimum size) FRESH OIL AHEAD, signs prior to applying the prime coat.

Shields, covers or other suitable equipment shall be provided by the Contractor to protect the motoring public, adjoining pavement, curbs, and/or structures during the application of the prime coat.

Method of Measurement: The Contractor will be required to present a weight ticket of the truckload prior to applying the prime coat. After application the truck shall then be weighed again in order to determine the net weight of prime coat that has been placed. Both tickets shall be stamped by a certified weighmaster. The quantity in gallons shall be computed according to Article 1032.02 of the "Standard Specifications".

Basis of Payment: This work will be paid for at the contract unit price per pound for BITUMINOUS MATERIALS (PRIME COAT). The unit price shall include all equipment, materials and labor required to furnish and apply the prime coat.

FINE AGGREGATE FOR HOT-MIX ASPHALT (HMA) (D-1)

Effective: May 1, 2007 Revised: January 1, 2012 Revise Article 1003.03 (c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA1, FA 2, FA 20, FA 21 or FA 22. When Reclaimed Asphalt Pavement (RAP) is incorporated in the HMA design, the use of FA 21 Gradation will not be permitted.

FRICTION SURFACE AGGREGATE (D1)

Effective: January 1, 2011 Revised: November 1, 2013

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

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

(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:
		Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete

Use	Mixture	Aggregates Allowed			
HMA All Other	Shoulders	Allowed Alone or in Combination: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) ^{1/} Crushed Steel Slag ^{1/} Crushed Concrete			
HMA High ESAL Low ESAL	C Surface IL-12.5,IL-9.5, or IL-9.5L	Allowed Alone or in Co Crushed Gravel Carbonate Crushed St Crystalline Crushed St Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete	one		
HMA High ESAL	D Surface IL-12.5 or IL-9.5	Allowed Alone or in Co Crushed Gravel Carbonate Crushed Limestone) Crystalline Crushed Sta Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete	Stone (other than one		
		Other Combinations Allowed:			
		Up to	With		
		25% Limestone	Dolomite		
		50% Limestone	Any Mixture D aggregate other than Dolomite		

Use	Mixture	Aggregates Allowed			
		75% Limestone	Crushed Slag (ACBF) ^{1/} or Crushed Sandstone		
HMA High ESAL	F Surface IL-12.5 or IL-9.5	Allowed Alone or in C Crystalline Crushed S Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} No Limestone or no C Other Combinations A Up to 50% Crushed Gravel, or Dolomite	tone ^{1/} Crushed Gravel alone.		
HMA High ESAL	SMA Ndesign 80 Surface	Crystalline Crushed S Crushed Sandstone Crushed Steel Slag	tone		

1/ When either slag is used, the blend percentages listed shall be by volume.

Add the following to Article 1004.03 (b)

"When using Crushed Concrete, the quality shall be determined as follows. The Contractor shall obtain a representative sample from the stockpile, witnessed by the Engineer, at a frequency of 2500 tons (2300 metric tons). The sample shall be a minimum of 50 lb (25 kg). The Contractor shall submit the sample to the District Office. 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 by weight will be applied for acceptance. The stockpile shall be sealed until test results are complete and found to meet the specifications above."

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HMA MIXTURE DESIGN REQUIREMENTS (D-1)

Effective: January 1, 2013 Revised: November 1, 2013

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

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

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

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

1) Design Composition and Volumetric Requirements

Revise the following table in Article 1030.01 of the Standard Specifications to read.

	IL-25.0 binder; IL-19.0 binder;	
High ESAL	IL-12.5 surface; IL-9.5 surface; IL-4.75, SMA	

Revise the following table in Article 1030.04(a)(1):

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

High ESAL, MIXTURE COMPOSITION (% PASSING) 1/

Route: FAU 178 Wilson Road Underpass Section: 14-F3000-02-BT County: Lake Contract No. 63808

Sieve Size	IL-25	.0 mm	IL-19	.0 mm	IL-12	.5 mm	IL-9.	5 mm	IL-4.7	'5 mm		1A ^{4/} .5 mm		1A ^{4/} 5 mm
	Min	max	min	max	min	max	min	max	min	max	min	max	min	max
1 1/2 in (37.5 mm)		100												
1 in. (25 mm)	90	100		100										
3/4 in. (19 mm)		90	82	100		100						100		
1/2 in, (12.5 mm)	45	75	50	85	90	100		100		100	80	100		100
3/8 in. (9.5 mm)						89	90	100		100		65	90	100
#4 (4.75 mm)	24	42 ^{2/}	24	50 ^{2/}	28	65	32	69	90	100	20	30	36	50
#8 (2.36 mm)	16	31	20	36	28	48 ^{3/}	32	52 ^{3/}	70	90	16	24 ^{5/}	16	32
#16 (1.18 mm)	10	22	10	25	10	32	10	32	50	65				
#30 (600 μm)											12	16	12	18
#50 (300 μm)	4	12	4	12	4	15	4	15	15	30				
#100 (150 μm)	3	9	3	9	3	10	3	10	10	18				
#200 (75 μm)	3	6	3	6	4	6	4	6	7	9 ^{6/}	7.0	9.0 ^{6/}	7.5	9.5 ^{6/}
Ratio Dust/Asphalt Binder		1.0		1.0		1.0		1.0		1.0		1.5		1.5

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 40 percent passing the #4 (4.75 mm) sieve for binder courses with Ndesign □ 90.
- 4/ The maximum percent passing the 20

 \Box m sieve shall be \leq 3 percent.

- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the #8 (2.36mm) sieve shall not be adjusted above 24 percent.
- 6/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer."

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

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

"(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent and for IL-4.75 it shall be 3.5 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix, and shall conform to the following requirements.

	VOLUMETRIC REQUIREMENTS High ESAL							
	Voids in the Mineral Aggregate Voids Fille (VMA), with Aspha % minimum Binder							
Ndesign	IL-25.0 IL-19.0 IL-12.5 IL-9.5 IL-4.75 ¹⁷ (
50 70	12.0	13.0	14.0	15.0	18.5	65 – 78 ^{2/}		
90 105						65 - 75		

- 1/ Maximum Draindown for IL-4.75 shall be 0.3%
- 2/ VFA for IL-4.75 shall be 72-85%"
- Delete Article 1030.04(b) (4) of the Standard Specifications.

Revise table in Article 1030.04(b)(5) as follows:

"(5) SMA Mixtures.

	Volumetric R SM	Requirements	
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
80 4/	3.5	17 ^{2/}	75 - 83

- 1/ Maximum Draindown shall be 0.3%.
- 2/ Applies when specific gravity of coarse aggregate is \geq 2.760.
- Applies when specific gravity of coarse aggregate is < 2.760.
- 4/ For surface course, coarse aggregate shall be Class B Quality; the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone.* For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.*

*Blending of different types of aggregate will not be permitted.

2) Design Verification and Production

Description. The following states 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.

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

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

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

All new and renewal mix designs will be required to be tested, prior to submittal for Department verification meeting the following requirements:

(1)Hamburg Wheel Test criteria.

Asphalt Binder Grade	# Repetitions	Max Rut Depth (mm)
PG 70 -XX (or higher)	20,000	12.5
PG 64 -XX (or lower)	10,000	12.5

Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions. For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.

(2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 415 kPa (60 psi) for non-polymer modified performance graded (PG) asphalt binder and 550 kPa (80 psi) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 1380 kPa (200 psi)."

Production Testing.

Revise first paragraph of Article 1030.06(a) to read:

"(a) High ESAL and IL-4.75 Mixtures. For each contract, a 300 ton (275 metric tons) test strip, except for IL -4.75 it will be 400 ton (363 metric ton), 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"."

Delete second paragraph of Article 1030.06 (a).

Revise first sentence in fourth paragraph of Article 1030.06 (a) to read:

"Before constructing the test strip, target values shall be determined by applying gradation correction factors to the JMF when applicable."

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).

Add the following to Article 1030.06 of the Standard Specifications:

(c) Hamburg Wheel Test. All HMA mixtures shall be sampled within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract.

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

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 are being met. No additional mixture shall be produced until the Engineer receives passing Hamburg Wheel tests.

Basis of Payment. Revise the seventh paragraph of Article 406.14 of the Standard Specifications to read:

"For all 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.

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

GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)

Effective: June 26, 2006 Revised: January 1, 2013

Add the following to the end of article 1032.05 of the Standard Specifications:

"(c) Ground Tire Rubber (GTR) Modified Asphalt Binder. A quantity of 10.0 to 14.0 percent GTR (Note 1) shall be blended by dry unit weight with a PG 64-28 to make a GTR 70-28 or a PG 58-28 to make a GTR 64-28. The base PG 64-28 and PG 58-28 asphalt binders shall meet the requirements of Article 1032.05(a). Compatible polymers may be added during production. The GTR modified asphalt binder shall meet the requirements of the following table.

Test	Asphalt Grade GTR 70-28	Asphalt Grade GTR 64-28
Flash Point (C.O.C.), AASHTO T 48, °F (°C), min.	450 (232)	450 (232)
Rotational Viscosity, AASHTO T 316 @ 275 °F (135 °C), Poises, Pa·s, max.	30 (3)	30 (3)
Softening Point, AASHTO T 53, °F (°C), min.	135 (57)	130 (54)
Elastic Recovery, ASTM D 6084, Procedure A (sieve waived) @ 77 °F, (25 °C), aged, ss, 100 mm elongation, 5 cm/min., cut immediately, %, min.	65	65

Note 1. GTR shall be produced from processing automobile and/or light truck tires by the ambient grinding method. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall contain no free metal particles or other materials. A mineral powder (such as talc) meeting the requirements of AASHTO M 17 may be added, up to a maximum of four percent by weight of GTR to reduce sticking and caking of the GTR particles. When tested in accordance with Illinois modified AASHTO T 27, *a* 50 g sample of the GTR shall conform to the following gradation requirements:

Sieve Size	Percent Passing
No. 16 (1.18 mm)	100
No. 30 (600 μm)	95 ± 5
No. 50 (300 μm)	> 20

Add the following to the end of Note 1. of article 1030.03 of the Standard Specifications:

"A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing throughout by continuous agitation and recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of ± 0.40 percent."

Revise 1030.02(c) of the Standard Specifications to read:

"(c) RAP Materials (Note 3)1031"

Add the following note to 1030.02 of the Standard Specifications:

Note 3. When using reclaimed asphalt pavement and/or reclaimed asphalt shingles, the maximum asphalt binder replacement percentage shall be according to the most recent special provision for recycled materials.

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1)

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

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

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

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material resulting from cold milling or crushing an existing hot-mix asphalt (HMA) pavement. RAP will be considered processed FRAP after completion of both crushing and screening to size. 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 90 percent passing the #4 (4.75 mm) sieve . RAS 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. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP -#4 or Type 2 RAS", etc...).
 - (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent 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 processed prior to testing and sized into 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 in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.
 - (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, Superpave (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 inch single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
 - (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent 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 (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
 - (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. 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 or other expansive material as determined by the Department.

(5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP or FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, plant cleanout 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 be sufficiently separated to prevent intermingling at the base. Each stockpile shall be signed indicating what type of RAS is present. However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of type 1 RAS with type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and 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. FRAP and RAS testing shall be according to the following.

- (a) FRAP Testing. When used in HMA, the FRAP shall be sampled and tested either during processing or after stockpiling. It shall also be sampled during HMA production.
 - (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) Incoming Material. For testing as incoming material, washed extraction samples shall be run at a minimum frequency of one sample per 2000 tons (1800 metric tons) or once per week, whichever comes first.
 - (3) 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.

Before extraction, each field sample of FRAP, shall be split to obtain two 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 shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.
 - (1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run 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 1000 tons (900 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 shall be 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.
 - (2) Incoming Material. For testing as incoming material at the HMA plant, washed extraction shall be run at the minimum frequency of one sample per 250 tons (227 metric tons). A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). The incoming material test results shall meet the tolerances specified herein.

The Contractor shall obtain and make available all test results from start of the initial stockpile sampled and tested at the shingle processing facility in accordance with the facility's QC Plan.

Before extraction, each field sample shall be split to obtain two 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 procedures. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

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

(a) Evaluation of FRAP Test Results. All test results shall be compiled to include asphalt binder content, gradation and, when applicable (for slag), G_{mm}. A five test average of results from the original pile will be used in the mix designs. Individual extraction test

results run thereafter, shall be compared to the average used for the mix design, and will
be accepted if within the tolerances listed below.

Parameter	FRAP
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %
No. 30 (600 μm)	± 5 %
No. 200 (75 μm)	± 2.0 %
Asphalt Binder	± 0.3 %
G _{mm}	± 0.03 ^{1/}

 For stockpile with slag or steel slag present as determined in the current Manual of Test Procedures Appendix B 21, "Determination of Reclaimed Asphalt Pavement Aggregate Bulk Specific Gravity".

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the FRAP stockpile shall not be used in Hot-Mix Asphalt unless the FRAP representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

The Contractor shall maintain a representative moving average of five tests to be used for Hot-Mix Asphalt production.

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)" or Illinois Modified AASHTO T-164-11, Test Method A.

(b) Evaluation of RAS 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. A five test average of results from the original pile will be used in the mix designs. Individual test results run thereafter, when compared to the average used for the mix design, 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)	± 2.5 %
Asphalt Binder Content	± 2.0 %

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the RAS shall not be used in

Hot-Mix Asphalt unless the RAS representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

(c) Quality Assurance by the Engineer. The Engineer may witness the sampling and splitting conduct assurance tests on split samples taken by the Contractor for quality control testing a minimum of once a month.

The overall testing frequency will be performed over the entire range of Contractor samples for asphalt binder content and gradation. The Engineer may select any or all split samples for assurance testing. The test results will be made available to the Contractor as soon as they become available.

The Engineer will notify the Contractor of observed deficiencies.

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

Test Parameter	Acceptable Limits of Precision	
% Passing: ^{1/}	FRAP	RAS
1 / 2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	3.0%
No. 200	2.2%	2.5%
Asphalt Binder Content	0.3%	1.0%
G _{mm}	0.030	

1/ Based on washed extraction.

In the event comparisons are outside the above acceptable limits of precision, the Engineer will immediately investigate.

(d) Acceptance by the Engineer. Acceptable of the material will be based on the validation of the Contractor's quality control by the assurance process.

1031.05 Quality Designation of Aggregate in RAP and 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. Fractionated RAP 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. The fine aggregate portion of the fractionated RAP shall not be used in any HMA mixtures that require a minimum of "B" quality aggregate or better, until the coarse aggregate fraction has been determined to be acceptable thru a MicroDeval Testing.

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

- (a) FRAP. The use of FRAP in HMA shall be as follows.
 - (1) Coarse Aggregate Size (after extraction). The coarse aggregate in all FRAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
 - (2) Steel Slag Stockpiles. FRAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) mixtures regardless of lift or mix type.
 - (3) Use in HMA Surface Mixtures (High and Low ESAL). FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall have coarse aggregate that is Class B quality or better. FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 inch.
 - (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. FRAP stockpiles for use in HMA binder mixtures (High and

Low ESAL), HMA base course, and HMA base course widening shall be FRAP in which the coarse aggregate is Class C quality or better.

- (5) Use in Shoulders and Subbase. FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, Restricted FRAP, conglomerate, or conglomerate DQ.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with FRAP in HMA mixtures up to a maximum of 5.0% by weight of the total mix.

When FRAP, RAS or FRAP in conjunction with RAS is used, the percent of virgin asphalt binder replacement (ABR) shall not exceed the amounts indicated in the table below for a given N Design.

HMA Mixtures 1/2/4/	Maximum % ABR		
Ndesign	Binder/LevelingSurfacePolymerBinderModified		
30L	50	40	30
50	40	35	30
70	40	30	30
90	40	30	30
4.75 mm N-50			40
SMA N-80			30

Max Asphalt Binder Replacement for FRAP with RAS Combination

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N-30, the percent asphalt binder replacement shall not exceed 50% of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 percent for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 percent, the required virgin asphalt binder grade shall be PG64-28.
- 3/ When the ABR for SMA or IL-4.75 is 15 percent or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.

4/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10%.

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) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements herein, the additional FRAP or RAS stockpiles may be used in the original 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 FRAP and/or RAS shall be as follows.

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 RAS and FRAP 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 during mix production, corrective actions fail to maintain FRAP, RAS or QC/QA test results within control tolerances or the requirements listed herein the Contractor shall cease production of the mixture containing FRAP or RAS and conduct an investigation that may require a new mix design.

- (a) 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.
- (b) HMA Plant Requirements. HMA plants utilizing 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 RAS and FRAP 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 RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.
- h. Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)
- i. When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.
- j. Accumulated mixture tonnage.
- k. Dust Removed (accumulated to the nearest 0.1 ton)
- (2) Batch Plants.
 - a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - d. Mineral filler weight to the nearest pound (kilogram).
 - f. RAS and FRAP weight to the nearest pound (kilogram).
 - g. Virgin asphalt binder weight to the nearest pound (kilogram).
 - h. Residual asphalt binder in the RAS and FRAP 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 or FRAP in aggregate surface course and aggregate shoulders 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. (37.5mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded, FRAP, or single sized will not be accepted for use as Aggregate Surface Course and Aggregate Shoulders."

PIPE DRAINS

Effective: January 1, 2007 Revised: December 19, 2012

Description: This work shall consist of constructing pipe drains of the required inside diameter.

Materials: The pipe drain materials shall meet the requirements of Article 601.02 of the "Standard Specifications" except that:

The pipes shall be limited to:

- (I) Polyvinyl Chloride (PVC) pipe [1040.03(a)]
- (o) Corrugated Polyvinyl Chloride (PVC) pipe with a smooth interior [1040.03(d)]
- (s) Corrugated Polyethylene (PE) Pipe with a Smooth Interior [1040.04(a)]

General: The work shall be performed according to Section 601 of the "Standard Specifications" and the following:

The work shall include constructing pipe drains to replace and/or relocate existing drainage lines (field tiles, sump pump outlets, etc...) encountered during construction.

The work shall also include providing a drainage outlet for traffic signal and/or interconnect handholes when in the opinion of the Engineer the additional drainage is required. The handhole drainage pipe shall extend from the handhole and outlet in a drainage ditch or drainage structure.

Pipe drains emptying into a drainage ditch shall be fitted with a concrete collar as shown on Lake County Division of Transportation standard LC6020 (section A-A). The rodent shields shown on LC6020 shall also be included.

Pipe drain connections to handholes and/or drainage structures shall be made as on Lake County Division of Transportation standard LC6020 (Detail C).

Method of Measurement: Contingency quantities of 4" and 6" pipe drain have been included in this contract so that if drainage lines are encountered, and/or handhole drainage is required by the Engineer, a unit price will have been established for this work. Pipe drains shall be measured in place, in feet, of actual pipe installed.

PIPE CULVERTS, CLASS D, TYPE 1 (OF DIA. SPECIFIED)

Remove the following from, Article 542.03 of the Standard Specifications:

"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: **Corrugated Steel Pipe Corrugated Steel Pipe Arch** Bituminous Coated Corrugated Steel Pipe Bituminous Coated Corrugated Steel Pipe Arch Zinc and Aramid Fiber Composite Coated Corrugated Steel Pipe 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 Polyvinyl Chloride (PVC) Profile Wall Pipe-794 Polyvinyl Chloride (PVC) Profile Wall Pipe-304"

All other requirements of Section 542 of the Standard Specification shall apply

STORM SEWERS JACKED IN PLACE

Description: This work shall consist of furnishing and installing, by jacking, storm sewers of the required inside diameter at locations shown on the plans and work shall be performed according to Section 552 of the Standard Specifications, as modified herein, and as shown on the plans. The Contractor shall coordinate this work with the construction of the proposed retaining walls.

Submittals: The contractor shall submit to the Engineer for approval, procedures for installation of the storm sewer pipe, including: jacking pit size, receiving pit size (if necessary), access plan, dewatering and erosion control plans, equipment and method of installation, soil support and retention plans, temporary embankment support, methods of verifying accuracy of placement, and method of securing and sealing pipe joints. No work will be allowed on this item until procedures have been approved by the Engineer.

This work shall include the installation of a bracing system and/or temporary embankment support, excavation, and backfilling to the elevation of the proposed grade according to Section 502 and the following. The bracing system shall be designed and installed to prevent the movement of soil structures, pavements and/or utilities adjacent to the excavated area.

The bracing system shall support excavations by the use of sheeting, timber or plates. The Contractor shall submit design calculations and shop drawings prepared and sealed by an Illinois Licensed Structural Engineer for the bracing system or temporary embankment support. Shop drawings shall show all necessary details for the construction of the bracing system and temporary embankment support. The design calculations and shop drawings shall be submitted to the Engineer for review and approval.

This work shall not proceed without the approval and authorization of the Engineer. However, in any event, the Contractor shall be fully responsible for the safety, stability and adequacy of the bracing system or temporary embankment support and shall be solely responsible and liable for all damages resulting from his construction operations or from failure or inadequacy of the bracing system or temporary embankment support. In the event the bracing system or temporary embankment support, in the event the bracing system or temporary embankment support, in the event the bracing system or temporary embankment support, in the event the bracing system or temporary embankment support, in the existing embankment fails or is otherwise inadequate, in the judgment of the Engineer, the Contractor shall, at his own expense, take all necessary steps to restore the embankments to a safe operating condition to the satisfaction of the Engineer.

Bracing members shall be installed as soon as an excavation level is reached to permit their

installation. Bracing members shall be completely removed after the excavation is backfilled. When work has been completed the bracing system and temporary embankment support system shall be removed and disposed of according to Section 501 of the Standard Specifications or as directed by the Engineer. Erosion Control measures shall be in place prior to commencing storm sewer jacking operations.

The following text from Section 552 of the standard specifications shall not apply: "The contractor may shorten the length of storm sewer to be jacked by open cutting and sheeting, shoring, or bracing the excavation outside of the roadway limits." The contractor shall jack the sewer to the line, length, and grade indicated on the plans with no additional open cutting allowed.

Method of Measurement: This work will be measured for payment in place in feet.

Basis of Payment: The work shall be paid for at the contract unit price per foot for STORM SEWERS JACKED IN PLACE, of the diameter specified.

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

Effective: January 1, 2007 Revised: August 1, 2011

Description: This work shall consist of removing existing raised reflective pavement markers.

General: The work shall be performed according to Section 783 of the "Standard Specifications" and the following:

The work shall include the removal of the raised reflective pavement marker and patching the resulting hole with hot-mix asphalt leveling binder. The leveling binder shall be compacted and leveled to the same elevation as the surrounding existing pavement surface.

Basis of Payment: This work will be paid for at the contract unit price per each for RAISED REFLECTIVE PAVEMENT MARKER REMOVAL. The unit price shall include all equipment, materials and labor required to remove the existing raised reflective pavement marker and place the leveling binder.

ELECTRIC SERVICE INSTALLATION

Effective: January 1, 2012

Description: This item shall consist of all material and labor required to extend, connect or modify the electric services, as indicated or specified, which is over and above the work performed by the utility. Unless otherwise indicated, the cost for the utility work, if any, will be reimbursed to the Contractor separately under ELECTRIC UTILITY SERVICE CONNECTION. This item may apply to the work at more than one service location and each will be paid separately.

Materials: Materials shall be in accordance with the Standard Specifications.

CONSTRUCTION REQUIREMENTS

General: The Contractor shall ascertain the work being provided by the electric utility and shall provide all additional material and work not included by other contract pay items required to complete the electric service work in complete compliance with the requirements of the utility.

No additional compensation will be allowed for work required for the electric service, even though not explicitly shown on the Drawings or specified herein

Method Of Measurement: Electric Service Installation shall be counted, each.

Basis Of Payment: This work will be paid for at the contract unit price each for ELECTRIC SERVICE INSTALLATION which shall be payment in full for the work specified herein.

ELECTRIC UTILITY SERVICE CONNECTION (COMED)

Effective: January 1, 2012

Description: This item shall consist of payment for work performed by ComEd in providing or modifying electric service as indicated. THIS MAY INVOLVE WORK AT MORE THAN ONE ELECTRIC SERVICE. For summary of the Electrical Service Drop Locations see the schedule contained elsewhere herein.

CONSTRUCTION REQUIREMENTS

General: It shall be the Contractor's responsibility to contact ComEd. The Contractor shall coordinate his work fully with the ComEd both as to the work required and the timing of the installation. No additional compensation will be granted under this or any other item for extra work caused by failure to meet this requirement. Please contact ComEd, New Business Center Call Center, at 866 NEW ELECTRIC (1-866-639-3532) to begin the service connection process. The Call Center Representatives will create a work order for the service connection. The representative will ask the requestor for information specific to the request. The representative will assign the request based upon the location of project.

The Contractor should make particular note of the need for the earliest attention to arrangements with ComEd for service. In the event of delay by ComEd, no extension of time will be considered applicable for the delay unless the Contractor can produce written evidence of a request for electric service within 30 days of execution.

Method Of Payment: The Contractor will be reimbursed to the exact amount of money as billed by ComEd for its services. Work provided by the Contractor for electric service will be paid separately as described under ELECTRIC SERVICE INSTALLATION. No extra compensation shall be paid to the Contractor for any incidental materials and labor required to fulfill the requirements as shown on the plans and specified herein. For bidding purposes, this item shall be estimated as \$5000.

Basis Of Payment: This work will be paid for at the contract lump sum price for **ELECTRIC SERVICE INSTALLATION** which shall be reimbursement in full for electric utility service charges.

GENERAL ELECTRICAL REQUIREMENTS

Effective: January 1, 2012

Add the following to Article 801 of the Standard Specifications:

"Maintenance transfer and Preconstruction Inspection:

<u>General.</u> Before performing any excavation, removal, or installation work (electrical or otherwise) at the site, the Contractor shall request a maintenance transfer and preconstruction site inspection, to be held in the presence of the Engineer and a representative of the party or parties responsible for maintenance of any lighting and/or traffic control systems which may be affected by the work. The request for the maintenance transfer and preconstruction shall be made no less than seven (7) calendar days prior to the desired inspection date. The maintenance transfer and preconstruction shall:

Establish the procedures for formal transfer of maintenance responsibility required for the construction period.

Establish the approximate location and operating condition of lighting and/or traffic control systems which may be affected by the work

Marking of Existing Cable Systems. The party responsible for maintenance of any existing lighting and/or traffic control systems at the project site will, at the Contractor's request, mark and/or stake, once per location, all underground cable routes owned or maintained by the State. A project may involve multiple "locations" where separated electrical systems are involved (i.e. different controllers). The markings shall be taken to have a horizontal tolerance of at least 304.8 mm (one (1) foot) to either side.. The request for the cable locations and marking shall be made at the same time the request for the maintenance transfer and preconstruction inspection is made. The Contractor shall exercise extreme caution where existing buried cable runs are involved. The markings of existing systems are made strictly for assistance to the Contractor and this does not relieve the Contractor of responsibility for the repair or replacement of any cable run damaged in the course of his work, as specified elsewhere herein. Note that the contractor shall be entitled to only one request for location marking of existing systems and that multiple requests may only be honored at the contractor's expense. No locates will be made after maintenance is transferred, unless it is at the contractor's expense.

<u>Condition of Existing Systems</u>. The Contractor shall conduct an inventory of all existing electrical system equipment within the project limits, which may be affected by the work, making note of any parts which are found broken or missing, defective or malfunctioning. Megger and load readings shall be taken for all existing circuits which will remain in place or be modified. If a circuit is to be taken out in its entirety, then readings do not have to be taken. The inventory and test data shall be reviewed with and approved by the Engineer and a record of the inventory shall be submitted to the Engineer for the record. Without such a record, all systems transferred to the Contractor for maintenance during construction shall be returned at the end of construction in complete, fully operating condition."

Add the following to the 1st paragraph of Article 801.05(a) of the Standard Specifications:

"Items from multiple disciplines shall not be combined on a single submittal and transmittal. Items for lighting, signals, surveillance and CCTV must be in separate submittals since they may be reviewed by various personnel in various locations."

Revise the second sentence of the 5th paragraph of Article 801.05(a) of the Standard Specifications to read:

"The Engineer will stamp the submittals indicating their status as 'Approved', 'Approved as Noted', 'Disapproved', or 'Information Only'.

Revise the 6th paragraph of Article 801.05(a) of the Standard Specifications to read:

<u>"Resubmittals</u>. All submitted items reviewed and marked 'Approved as Noted', or 'Disapproved' are to be resubmitted in their entirety with a disposition of previous comments to verify contract compliance at no additional cost to the state unless otherwise indicated within the submittal comments."

Revise Article 801.11(a) of the Standard Specifications to read:

"<u>Lighting Operation and Maintenance Responsibility</u>. The scope of work shall include the assumption of responsibility for the continuing operation and maintenance the of existing, proposed, temporary, sign and navigation lighting, or other lighting systems and all appurtenances affected by the work as specified elsewhere herein. Maintenance of lighting systems is specified elsewhere and will be paid for separately

<u>Energy and Demand Charges.</u> The payment of basic energy and demand charges by the electric utility for existing lighting which remains in service will continue as a responsibility of the Owner, unless otherwise indicated. Unless otherwise indicated or required by the Engineer duplicate lighting systems (such as temporary lighting and proposed new lighting) shall not be operated simultaneously at the Owner's expense and lighting systems shall not be kept in operation during long daytime periods at the Owner's expense. Upon written authorization from the Engineer to place a proposed new lighting system in service, whether the system has passed final acceptance or not, (such as to allow temporary lighting to be removed), the Owner will accept responsibility for energy and demand charges for such lighting, effective the date of authorization. All other energy and demand payments to the utility shall be the responsibility of the Contractor until final acceptance."

Add the following to Section 801 of the Standard Specifications:

<u>"Lighting Cable Identification</u>. Each wire installed shall be identified with its complete circuit number at each termination, splice, junction box or other location where the wire is accessible."

"Lighting Cable Fuse Installation. Standard fuse holders shall be used on non-frangible (non-breakaway) light pole installations and quick-disconnect fuse holders shall be used on frangible (breakaway) light pole installations. Wires shall be carefully stripped only as far as needed for connection to the device. Over-stripping shall be avoided. An oxide inhibiting lubricant shall be applied to the wire for minimum connection resistance before the terminals are crimped-on. Crimping shall be performed in accordance with the fuse holder manufacturer's recommendations. The exposed metal connecting portion of the assembly shall be taped with two half-lapped wraps of electrical tape and then covered by the specified insulating boot. The fuse holder shall be installed such that the fuse side is connected to the pole wire (load side) and the receptacle side of the holder is connected to the line side."

Revise the 2nd paragraph of Article 801.16 of the Standard Specifications to read:

"When the work is complete, and seven days before the request for a final inspection, the full-size set of contract drawings. Stamped "RECORD DRAWINGS", shall be submitted to the Engineer for review and approval and shall be stamped with the date and the signature of the Contractor's supervising Engineer or electrician. The record drawings shall be submitted in PDF format on CDROM as well as hardcopy for review and approval. In addition to the record drawings, copies of the final catalog cuts which have been Approved or Approved as Noted shall be submitted in PDF format along with the record drawings. The PDF files shall clearly indicate either by filename or PDF table of contents the respective pay item number. Specific part or model numbers of items which have been selected shall be clearly visible."

Add the following to Article 801.16 of the Standard Specifications:

"In addition to the specified record drawings, the Contactor shall record GPS coordinates of the following electrical components being installed, modified or being affected in other ways by this contract:

- Last light pole on each circuit
- Handholes
- Conduit roadway crossings
- Controllers
- Control Buildings
- Structures with electrical connections, i.e. DMS, lighted signs.
- Electric Service locations
- CCTV Camera installations
- Fiber Optic Splice Locations

Datum to be used shall be North American 1983.

Data shall be provided electronically and in print form. The electronic format shall be compatible with MS Excel. Latitude and Longitude shall be in decimal degrees with a minimum of 6 decimal places. Each coordinate shall have the following information:

- 1. Description of item
- 2. Designation or approximate station if the item is undesignated
- 3. Latitude
- 4. Longitude

Examples:

Equipment Description	Equipment Designation	Latitude	Longitude
CCTV Camera pole	ST42	41.580493	-87.793378
FO mainline splice handhole	HHL-ST31	41.558532	-87.792571
Handhole	HH at STA 234+35	41.765532	-87.543571
Electric Service	Elec Srv	41.602248	-87.794053
Conduit crossing	SB IL83 to EB I290 ramp SIDE A	41.584593	-87.793378
Conduit crossing	SB IL83 to EB 1290 ramp SIDE B	41.584600	-87.793432
Light Pole	DA03	41.558532	-87.792571
Lighting Controller	X	41.651848	-87.762053
Sign Structure	FGD	41.580493	-87.793378
Video Collection Point	VCP-IK	41.558532	-87.789771
Fiber splice connection	Toll Plaza34	41.606928	-87.794053

Prior to the collection of data, the contractor shall provide a sample data collection of at least six data points of known locations to be reviewed and verified by the Engineer to be accurate within 100 feet. Upon verification, data collection can begin. Data collection can be made as construction progresses, or can be collected after all items are installed. If the data is unacceptable the contractor shall make corrections to the data collection equipment and or process and submit the data for review and approval as specified.

Accuracy. Data collected is to be mapping grade. A handheld mapping grade GPS device shall be used for the data collection. The receiver shall support differential correction and data shall have a minimum 5 meter accuracy after post processing.

GPS receivers integrated into cellular communication devices, recreational and automotive GPS devices are not acceptable.

The GPS shall be the product of an established major GPS manufacturer having been in the business for a minimum of 6 years."

UNDERGROUND RACEWAYS

Effective: January 1, 2012

Revise Article 810.04 of the Standard Specifications to read:

"Installation. All underground conduit shall have a minimum depth of 30-inches (700 mm) below the finished grade."

Add the following to Article 810.04 of the Standard Specifications:

"All metal conduit installed underground shall be Rigid Steel Conduit unless otherwise indicated on the plans."

Add the following to Article 810.04 of the Standard Specifications:

"All raceways which extend outside of a structure or duct bank but are not terminated in a cabinet, junction box, pull box, handhole, post, pole, or pedestal shall extend a minimum or 300 mm (12") or the length shown on the plans beyond the structure or duct bank. The end of this extension shall be capped and sealed with a cap designed for the conduit to be capped. The ends of rigid metal conduit to be capped shall be threaded, the threads protected with full galvanizing, and capped with a threaded galvanized steel cap. The ends of rigid nonmetallic conduit and coilable nonmetallic conduit shall be capped with a rigid PVC cap of not less than 3 mm (0.125") thick. The cap shall be sealed to the conduit using a room-temperature-vulcanizing (RTV) sealant compatible with the material of both the cap and the conduit. A washer or similar metal ring shall be glued to the inside center of the cap with epoxy, and the pull cord shall be tied to this ring."

Add the following to Article 810.04(c) of the Standard Specifications:

"Coilable non-metallic conduit shall be machine straightened to remove the longitudinal curvature caused by coiling the conduit onto reels prior to installing in trench, encasing in concrete or embedding in structure. The straightening shall not deform the cross-section of the conduit such that any two measured outside diameters, each from any location and at any orientation around the longitudinal axis along the conduit differ by more than 6 mm (0.25")." The longitudinal axis of the straightened conduit shall not deviate by more than 20 mm per meter (0.25" per foot" from a straight line. The HDPE and straightening mechanism manufacturer operating temperatures shall be followed.

WIRE AND CABLE

Effective: January 1, 2012

Add the following to the first paragraph of Article 1066.02(a):

"The cable shall be rated at a minimum of 90°C dry and 75°C wet and shall be suitable for installation in wet and dry locations, and shall be resistant to oils and chemicals."

Revise the Aerial Electric Cable Properties table of Article 1066.03(a)(3) to read:

Phase Conductor			Messenger v	vire	
Size AWG	Stranding	Average Insulation Thickness		Minimum Size AWG	Stranding
		mm	mils		
6	7	1.1	(45)	6	6/1
4	7	1. 1	(45)	4	6/1
2	7	1.1	(45)	2	6/1
1/0	19	1.5	(60)	1/0	6/1
2/0	19	1.5	(60)	2/0	6/1
3/0	19	1.5	(60)	3/0	6/1
4/0	19	1.5	(60)	4/0	6/1

Aerial Electric Cable Properties

Add the following to Article 1066.03(b) of the Standard Specifications:

"Cable sized No. 2 AWG and smaller shall be U.L. listed Type RHH/RHW and may be Type RHH/RHW/USE. Cable sized larger than No. 2 AWG shall be U.L. listed Type RHH/RHW/USE."

Revise Article 1066.04 to read:

"Aerial Cable Assembly. The aerial cable shall be an assembly of insulated aluminum conductors according to Section 1066.02 and 1066.03. Unless otherwise indicated, the cable assembly shall be composed of three insulated conductors and a steel reinforced bare aluminum conductor (ACSR) to be used as the ground conductor. Unless otherwise indicated, the code word designation of this cable assembly is "Palomino". The steel reinforced aluminum conductor shall conform to ASTM B-232. The cable shall be assembled according to ANSI/ICEA S-76-474."

Revise the second paragraph of Article 1066.05 to read:

"The tape shall have reinforced metallic detection capabilities consisting of a woven reinforced polyethylene tape with a metallic core or backing."

SEDIMENT BASIN

Description: This work shall consist of furnishing, installing, maintaining, and removing sediment basins at the locations shown on the plans. This work shall be in accordance with Section 280 and 281 of the Standard Specifications.

The sediment basin shall be constructed of rip rap and geotextile fabric per NRCS standard drawing IL-660 for "temporary sediment trap" as shown in the plans. The sediment basin shall be constructed as soon as feasible during earthwork stockpiling operations. The basin will be built to the dimension and elevation shown in the plans, with the permanent stockpile soil providing the containing side slopes of the basin.

The contractor shall maintain the basin until final soil stabilization is completed and removal is approved by the engineer. Maintenance shall include removing sediment from the basin when more than half the capacity of the original basin is lost to sedimentation from construction run off. Maintenance shall also include rebuilding the basin if the basin is washed out during a rain event or is damaged by the contractors operations. The basin may be relocated at the contractor's discretion with the approval of the engineer at no additional cost.

Method of Measurement: SEDIMENT BASIN will be measured for payment per each upon completion of construction of each sediment basin. Rip rap and geotextile fabric required to construct the basins shall not be measured separately for payment but shall be included in the pay item for sediment basin. Removal of the rip rap and geotextile fabric used to construct the basin as well as removal of accumulated sediment shall be included with the item SEDIMENT BASIN.

Basis of Payment: work will be paid for at the contract unit price per each for SEDIMENT BASIN.

SEEDING CLASS 2 (SPECIAL)

Description: This work shall consist of preparing the seed bed and placing the seed and other materials required in seeding operations on the shoulders, slopes, and other areas. This work shall be performed in accordance with Section 250 of the Standard Specifications.

The seed mix provided shall be as follows:

LCFP CLASS 2: LOW MAINTENANCE MIX

Species or Mix	(Notes)	lbs / A	% +/-
Fine Fescue Mix	(1)	200	80%
Perennial Rye Mix	(2)	50	20%
TOTAL		250	100%

Notes:

- A blend of creeping red, chewings, hard and sheep's fescue; acceptable commercial blends include Highlands Fescue Mix, Legend Fine Fescue Blend and Greenskeeper National Links Mixture.
- 2) A blend of at least three improved cultivars selected for disease resistance.

Basis of Payment: This work will be paid for at the contract unit price per acre for SEEDING CLASS 2 (SPECIAL).

SEEDING CLASS 3 (SPECIAL)

Description: This work shall consist of preparing the seed bed and placing the seed and other materials required in seeding operations on the shoulders, slopes, and other areas. This work shall be performed in accordance with Section 250 of the Standard Specifications.

The seed mix provided shall be as follows:

LCFP CLASS 3: MODIFIED PRAIRIE MIX

<u>Cover Crop</u> (1) Annual Rye	<u>lbs. / A</u> 25
Spring Oats	32
Subtotal	57 lbs.
<u>Native Grasses</u> (3)	<u>lbs. / A</u>
Elymus canadensis	3.5
Panicum virgatum	1.25
Bouteloua curtipendula	3
Andropogon scoparius	1.25
Andropogon gerardii	0.5
Sorghastrum nutans	0.5

Subtotal	10 lbs.
Native Forbs(2,3)Aster laevisAster novae-angliaeDesmodium canadenseEchinacea pallidaEupatorium purpureumLiatris pycnostachyaMonarda fistulosaPenstemon digitalisPetalostemum purpureumPycnanthemum virginianumRatibita pinnataRudbeckia hirtaRudbeckia subtomentosum	<i>10 lbs.</i> 0.5 1 10 14 2 6 1.9 1 8 0.5 4 2 4
Solidago speciosa <u>Veronicastrum virginicum</u> Subtotal	1 0.1 60 oz. (3.5 lbs.)
Cubiolai	0002.(5.0108.)

Notes:

- 1) For seeding after August 1, substitute 20 additional pounds of annual rye for 32 pounds of spring oats.
- 2) All native seed shall be provided as Pure Live Seed (PLS).
- 3) All native forbs shall be provided as current year crop as of the spring of the actual planting season.

Basis of Payment: This work will be paid for at the contract unit price per acre for SEEDING CLASS 3 (SPECIAL).

STONE RIP RAP, CLASS A4 (SPECIAL)

Description: Riprap shall be in accordance with Article 281.04a of the Standard Specifications for Stone Riprap with the following exceptions. The riprap shall be natural granite field stone cobbles reasonably graded from five (5) to eight (8) inches in diameter. Limestone riprap is not acceptable and will not be allowed. Samples of the specified material shall be submitted for approval to the LCFPD prior to delivery and placement. Riprap shall include appropriate bedding and filter fabric when specified on the construction plans.

The riprap shall be naturally occurring field stone cobbles consisting of a mixture of granite, dolomite and basalt as typically found in the geologic deposits of the Fox River basin of northern Illinois and southern Wisconsin. They shall be naturally rounded by geologic forces and reasonably graded.

As provided by:

Super Aggregates, 5435 Bull Valley Road, Suite 330, McHenry, IL 60050, (815) 385-8000 Or approved equal.

Thelen Sand And Gravel, 28955 W. IL Route 173, Antioch, IL 60002

Halquist Stone Co., N51 W23563 Lisben Rd, Sussex, WI 53089

Riprap shall be installed at the locations shown on the Construction Drawings and shall extend across the ditch bottom and up the ditch banks to the top of the culvert elevation. The riprap shallbe set in granular bedding and placed on an approved Geotextile Filter Fabric. Riprap shall be placed in accordance with Section 281 of the Standard Specifications.

Method of Measurement: This work will be measured for payment in units of square yard of riprap placed.

Basis of Payment: Payment for STONE RIPRAP, CLASS A4 (SPECIAL) will be made at the contract unit price per ton, which payment shall constitute full compensation for furnishing all materials, labor, tools, equipment and incidentals necessary to complete the work specified and removal of the structure when construction is completed or as directed by the Engineer. Geotextile filter fabric shall be paid for separately per square yard as FILTER FABRIC.

STRUCTURE EXCAVATION (SPECIAL)

Description: Structure Excavation (Special) shall be in accordance with Section 502 of the Standard Specifications for Excavation for Structures with the following exceptions. The limits of Structure Excavation (Special) shall follow what is shown on the plans. The Contractor will not be paid for over excavation beyond the limits of Structure Excavation (Special) that is shown on the plans.

The Contractor is alerted to the fact that the soil borings indicate an estimated static groundwater elevation of approximately 792 feet. Aggressive dewatering utilizing well-points, deep sumps, cut-off walls or other means may be necessary for deeper excavations. The dewatering should be accomplished prior to soil excavation. Soils exposed during excavation may lose bearing strength and stability if permitted to become saturated. Mud slabs, gravel blankets or other means may be required to stabilize the bottom of the excavations. The Contractor is responsible for designing and constructing stable temporary excavations by shoring, sloping, benching, or restraining the sides of excavations as required to maintain stability of both the excavation sides and bottom. If loss of bearing strength or stability occurs due to the Contractor not properly designing or constructing the excavation, the Contractor will be required to remove the unsuitable and/or unstable material and backfill as directed by the Engineer at no additional cost to the Contract. See Geotechnical Investigation Report for additional information.

The material removed as Structure Excavation (Special) shall not be used for backfill. Porous Granular Embankment shall be used to backfill all structure excavations.

Material removed beyond the limits shown on the plans will not be measured for payment unless approved in writing by the Engineer.

Method of Measurement: This work will be measured for payment in units of cubic yard of Structure Excavation (Special), measured for payment in its original position.

Basis of Payment: Payment for STRUCTURE EXCAVATION (SPECIAL) will be made at the contract unit price per cubic yard for STRUCTURE EXCAVATION (SPECIAL).

Backfilling of structure excavation areas will be paid for at the contract unit price per cubic yard for POROUS GRANULAR EMBANKMENT. Backfilling beyond the limits shown on the plans will not be measured for payment unless approved in writing by the Engineer.

All materials, labor, tools, equipment and incidentals necessary to dewater the site to allow for the excavation should be paid for separately at the contract unit price per lump sum for DEWATERING.

DEWATERING

Description: This work shall consist of providing labor, tools, equipment, and materials necessary for dewatering (regardless of the water source) all work areas to relatively dry conditions as determined by the Engineer and maintain suitable working conditions and sediment control so that the improvements are constructed in the dry.

The dewatering shall be 24 hours a day, seven days per week as needed to maintain relatively dry conditions for events up to the 10-Year 24-Hour storm event.

Products: Contractor shall be responsible for the choice of the products and equipment as well as "means and methods" for the Site Dewatering Work to be performed subject to the review of the Engineer. All products and "means and methods" selected shall be adequate for the intended use/application. Engineer's review does not relieve the Contractor from compliance with the requirements of the project, the Drawings and Specifications and the requirements of this Special Provision.

Submittals: Contractor shall submit to Engineer for review a description of dewatering techniques and equipment to be used, together with detail drawings showing lengths of discharge piping and point(s) of discharge including sediment and erosion control procedures using Best Management Practices (BMP's). Engineer's review of dewatering techniques and equipment shall in no way be construed as creating any obligation on the Owner for same.

Best Management Practices are anticipated (but not limited to) to include:

- Deep Sump Pits
- Pumps, Hoses, Etc.
- Wellpoints
- Point Source Discharge Protection (Rip Rap with Vegetative Buffer, Etc.)
- Flocculation Logs
- Flocculation Powder
- Erosion Control Blanket Jute Mat

- Rock Checks
- Ditch Checks
- Geotextile Fabric
- Dewatering Filter Bags
- Removal and proper disposal of all BMP's and sediment associated with dewatering
- Additional erosion and sediment control BMP's as per Engineer's direction

Responsibility: The Contractor shall be solely responsible for the choice of products and equipment; for the design, installation, and operation; as well as "means and methods" of performing the Work; and subsequent removal of dewatering systems and their safety and conformity with local codes, regulations and the Contract Documents. All products, equipment and "means and methods" selected shall be adequate for the intended use/application. Review by Engineer does not relieve Contractor from compliance with the requirements specified herein.

General Requirements: The Contractor shall select the pumps, the rate at which the pumps discharge, and adequate protection at the pump discharge shall be provided by the Contractor, subject to review by the Engineer. The Contractor shall ensure that downstream water quality shall not be impaired.

At all times during the excavation period and until completion and acceptance of the Work at Final Inspection, ample means and equipment shall be provided with which to remove promptly and dispose of properly all water (including ground water, river water, storm sewer water, storm runoff, and water generated from Contractor's activities) entering any excavation or any other parts of the Work.

Water pumped or drained from the work required for this Contract shall be disposed of in a safe and suitable manner without damage to adjacent waterways, wetlands, adjacent property or streets or to other work under construction. Water shall be discharged with adequate erosion and sediment control protection of the surface at the point of discharge. Water shall not be discharged within 50' of wetland boundaries as shown on the plans. No water shall be discharged into sanitary sewers. No water shall be discharged into storm sewers. Water shall be discharged to an upland area to allow filtration through vegetation. Any and all damages caused by dewatering the work shall be promptly repaired by the Contractor. The Contractor is responsible for providing any and all labor, materials and equipment needed for the DEWATERING in order to meet the scheduled completion of the project.

Method of Measurement and Basis of Payment: This work will be measured and paid for at the contract unit price per lump sum for DEWATERING.

MANHOLES, TYPE A, 4'-DIAMETER, WITH SPECIAL FRAME, CLOSED LID

Description: This work shall consist of furnishing, installing and adjustment of manholes with frames and lids at locations as shown on the plans. This work shall be in accordance with section 602 of the Standard Specifications.

Frames and lids for the manholes shall be Neenah Frame R-1556-A or equivalent as approved by the Lake County Forest Preserve. The furnishing, installation and final adjustment of the frame and lid shall be in accordance with Article 602.11 and Section 604 of the Standard Specifications. This work shall not be paid for separately but shall be considered included with the cost of this item.

Measurement and Payment: The work shall be paid for at the contract unit price per each for MANHOLES, TYPE A, 4'-DIAMETER, WITH SPECIAL FRAME, CLOSED LID, which price shall include all labor, materials and incidentals as described above.

TRAFFIC CONTROL AND PROTECTION (SPECIAL)

Effective: June 1, 2012

The Traffic Control and Protection (Special) shall meet the requirements of Division 700. Work Zone Traffic Control and Protection, Signing, and Pavement Marking of the "Standard Specifications" except as follows:

Article 701.01 Description shall be replaced with the following:

701.01 Description. This item of work shall consist of furnishing, installing, maintaining, replacing, relocating and removing all traffic control devices used for the purpose of regulating, warning or directing traffic during the construction or maintenance of this improvement.

Article 701.02 Materials shall be modified by adding the following paragraph:

Traffic control devices include signs and their supports, signals, pavement markings, barricades and their approved weights, channeling devices, warning lights, arrow boards, flaggers, or any other device used for the purpose of regulating, detouring, warning or guiding traffic through or around the construction zone.

Article 701.04 General shall be modified by adding the following as the first paragraph:

Traffic Control and Protection (Special) shall be provided as shown on the plans and applicable Highway Standards; as required in these special provisions and the applicable sections of the "Standard Specifications"; and/or as directed by the Engineer.

Article 701.04 General shall be modified by adding the following to the fourth paragraph:

The Contractor shall dispatch men, materials, and equipment to correct any such deficiencies. The Contractor shall respond to any call from LCDOT concerning any request for improving or correcting traffic control devices and begin making the requested repairs within two hours from the time of notification.

Article 701.10 Surveillance shall be replaced with the following:

The Contractor is required to conduct routine inspections of the work site at a

frequency that will allow for the timely replacement of any traffic control device that has become displaced, worn or damaged to the extent that it no longer conforms to the shape, dimensions, color and operational requirements of the MUTCD, the Traffic Control Standards, the IDOT Quality Standard For Work Zone Traffic Control Devices, or will no longer present a neat appearance to motorists. A sufficient quantity of replacement devices, based on vulnerability to damage, shall be readily available to meet this requirement.

The Contractor shall ensure that all the traffic control devices he/she installs are operational, functional and effective 24 hours a day, seven days a week, including holidays.

Article 701.13 Flaggers (a) shall be modified by revising the second paragraph of subparagraph (a) by adding the following:

The Engineer will determine when a side road or entrance shall be closed to traffic. The flagger shall be positioned as shown on the plans or as directed by the Engineer.

Article 701.14 Signs (a) Road Construction Ahead Signs shall be modified by changing the following in the paragraph:

"ROAD WORK AHEAD" signs shall be required in lieu of "ROAD CONSTRUCTION AHEAD" SIGNS

Article 701.14 Signs (b) Work Zone Speed Limit Signs shall be revised to read:

(b) Work Zone Speed Limit Signs. The Lake County Division of Transportation will specify whether a project meets the criteria for a Work Zone Speed Limit. When specified, the work zone speed limit signs shall be installed as shown on the LCDOT Work Zone Speed Limit Signing Diagram, LC7203, at a maximum of 20 feet lateral distance of the locations shown on the plans. Failure to install and maintain the required amount of signs at the proper sign spacing shall result in an immediate traffic control deficiency.

All permanent "SPEED LIMIT" signs located within the work zone shall be removed or covered. If the speed limit sign is to be covered, it shall be done in a manner that no part of the legend shall be visible in any lighting condition. This work shall be completed by the Contractor after the method of covering the speed limit signs has been approved by the Engineer.

The work zone speed limit signs and the end work zone speed limit signs in advance of and at the end of the lane closure(s) shall be used for the duration of the closure(s).

The work zone speed limit signs will be removed when roadway conditions return to normal or when the construction project is suspended for more than

30 days.

Article 701.14 Signs shall be modified by adding the following section (c),

(c) Temporary Construction Information Signs. When indicated in the traffic control plan or as directed by the Engineer the Contractor shall furnish, install, maintain, relocate, and remove for various stages of construction Temporary Construction Information Signs.

Temporary Construction Information Signs may include:

Driveway	White Legend on Green
	Background
Caution - New Lanes Open	Black Legend on Orange
	Background

The signs, as shown on Lake County Detail LC7201, shall be installed according to the traffic control plan and/or as directed by the Engineer.

Article 701.15 Traffic Control Devices (b) Type I, II and III Barricades shall be deleted and replaced with the following:

Type II barricades shall be used at all locations that call for Type I, or Type 11 barricades.

Type II barricades are used to channelize traffic; to delineate unattended obstacles, patches, excavations, drop-offs, and other hazards; and as check barricades

Any drop off greater than three inches, but less than six inches, located within eight feet of the pavement edge shall be protected by Type II barricades equipped with mono-directional steady burn lights. The barricades shall be placed at a spacing of 100 feet center to center. For any drop off within eight feet of the pavement edge that exceeds six inches, the Type II barricades equipped with mono-directional steady burn lights shall be placed at a spacing of 50 feet center to center. Barricades that must be placed in excavated areas shall have leg extensions installed so that the top of the barricade is in compliance with the height requirements of IDOT Standard 701901.

the use of the PCMS during the incident, the Contractor will be compensated for the labor and equipment to move the PCMS to the designated location and back, according to Article 109.04 (b) of the "Standard Specifications". In order to facilitate the movement of the PCMS in a timely manner, the LCDOT may use County Forces to move the PCMS to the designated location and/or back, at no additional cost to the Contractor.

When the sign(s) are displaying messages, they shall be considered a traffic

control device. At all other times when no message is displayed, they shall be considered equipment.

Basis of Payment. Changeable message signs will be paid for at the contract unit price per calendar month for each sign as CHANGEABLE MESSAGE SIGN, as stated in Article 701.20 of this special provision.

Article 701.17 Specific Construction Operations (c) Surface Courses and Pavement (1) Prime Coat shall be replaced by the following:

(1) Prime Coat. "FRESH OIL" signs (W21-2) shall be used when the prime coat is applied to pavement that is open to traffic. The signs shall remain in place until tracking of the prime ceases. These signs shall be erected a minimum of 500 feet preceding the start of the prime and on all side roads within the posted area. The signs on the side roads shall be posted a minimum of 200 feet from the mainline pavement. These signs are excluded from the time requirements of Article 701.04 of the "Standard Specifications" as modified by this special provision (above). Non-compliance with the provisions of this section, by the Contractor, shall result in an immediate traffic control deficiency deduction. All signs shall have an amber flashing light attached.

Article 701.17 Specific Procedures (c) Surface Courses and Pavement (2) Cold Milling shall be replaced by the following:

(2) Cold Milling. "ROUGH GROOVED SURFACE" signs (WB-1107) shall be used when the road has been cold milled and is open to traffic. The signs shall remain in place until the milled surface condition no longer exists. These signs shall be erected a minimum of 500 feet preceding the start of the milled pavement and on all side roads within the posted area. The signs on the side roads shall be posted a minimum of 200 feet from the mainline pavement. Non-compliance with the provisions of this section, by the Contractor, shall result in an immediate traffic control deficiency deduction. All signs shall have an amber flashing light attached.

Article 701.17 Specific Procedures (c) Surface Course and Pavement shall be modified by adding the following paragraph:

(6) Area Reflective Crack Control Treatment Fabric. "SLIPPERY WHEN WET" signs (W8-5) shall be used when crack control fabric is applied to pavement that is open to traffic. These signs shall remain in place until the binder course is laid. The signs shall be erected a minimum of 500 feet preceding the start of the crack control treatment and on all side roads within the posted area. The signs on the side roads shall be posted a minimum of 200 feet from the mainline pavement. These signs are excluded from the time requirements of Article 701.04 of the "Standard Specifications" as modified by this special provision (above). Non-compliance with the provisions of this section, by the Contractor, shall result in an immediate traffic control deficiency deduction. All signs shall have an amber flashing light attached.

Article 701.18 Highway Standards Application (b) Standard 701316 and 701321 (2) g. Detector Loops, shall be replaced with the following:

g. Detection. Microwave Vehicle Sensors shall be installed as directed by the Engineer. The LCDOT shall approve the proposed microwave vehicle sensor before the Contractor may furnish or install it. The Contractor shall install, wire and adjust the alignment of the sensor according to the manufacturer's recommendations and requirements. The Engineer shall approve the installation. An alternate method of detection may be used if it has been demonstrated and approved by the Department.

The microwave vehicle sensor shall meet the following requirements:

- Detection Range: Adjustable to 60 feet
- Detection Angle: Adjustable, horizontal and vertical
- Detection Pattern: 16 degree beam width minimum [at 50 feetthe pattern shall be approximately 15.5 feet wide]
- Mounting: Heavy-duty bracket, predrilled and slotted for pole mounting
- LED Indicator Light: For detection verification

Article 701.18 Highway Standards Application (j) Urban Traffic Control, Standards 701501, 701502, 701601, 701602, 701606, 701701, and 701801 (1) General, shall be modified by adding the following paragraphs:

Whenever a lane is closed to traffic using IDOT standard 701601, 701606, or 701701, the pavement width transition sign (W4-2R or W4-2L) shall be used in lieu of the "WORKERS" sign (W21-1 orW21-1a)

Whenever any vehicle, equipment, workers or their activities infringe on the shoulder or within 15 feet of the traveled way, and the traveled way remains unobstructed, then the applicable Traffic Control Standard shall be 701006, 701011, 701101, or 701701. The "SHOULDER WORK AHEAD" sign (W21-5(0)-48) shall be used in lieu of the "WORKERS" sign (W21-1 or W-21-1a).

Article 701.18 Highway Standards Application shall be modified by adding the following section (I):

(I) IDOT standard 701331. When IDOT standard 701331 is specified on

two-lane, two-way roadways, a "LANE SHIFT AHEAD" sign shall be added 500 feet in advance of W1-3 or W1-4 sign. The Road Work sign (W20-1) shall be extended to a total of 1500' from the start of the lane shift.

Article 701.19 Method of Measurement shall be replaced completely with the following:

701.19 Method of Measurement.

These items of work will be measured on a lump sum basis for furnishing installing, maintaining, replacing, relocating and removing the traffic control devices required in the plans and these special provisions.

Article 701.20 Basis of Payment shall be replaced completely with the following:

701.20 Basis of Payment

This work will be paid for at the contract unit price per lump sum for TRAFFIC CONTROL AND PROTECTION (SPECIAL). The payment will be in full for all labor, materials, transportation, and incidentals necessary to furnish, install, maintain, replace, relocate and remove all traffic control devices indicated in the plans and specifications, except for the following items, which will be paid for separately.

- 1) Temporary Bridge Traffic Signals
- 2) Temporary Rumble Strips [where each is defined as 25 feet]
- 3) Temporary Raised Pavement Markers
- 4) Sand module impact attenuators
- 5) Portable Changeable Message Signs
- 6) Temporary Concrete Barrier
- 7) Temporary Pavement Marking-Letters and Symbols
- 8) Temporary Pavement Marking-Line at width specified

The salvage value of the materials removed shall be reflected in the bid price for this item.

Any delays or inconveniences incurred by the Contractor while complying with these requirements shall be considered as part of TRAFFIC CONTROL AND PROTECTION (SPECIAL) and no additional compensation will be allowed.

Any traffic control devices required by the Engineer to implement the Traffic Control Plan as shown in the plans and specifications of the contract shall be considered included in the pay item TRAFFIC CONTROL AND PROTECTION (SPECIAL). If the Engineer requires additional work involving a substantial change of location and/or work which differs in design and/or work requiring a change in the type of construction, as stated in Article 104.02(d) of the "Standard Specifications", the standards and/or the designs, other than those required in the plans, will be made available to the Contractor at least one week in advance of the change in traffic control. Payment for any additional traffic control required for the reasons listed above will be in accordance with Article 109.04 of the "Standard Specifications".

Revisions in the phasing of construction or maintenance operations, requested by the Contractor, may require traffic control to be installed according to standards and/or designs other than those included in the plans. The Contractor shall submit revisions or modifications to the traffic control plan shown in the contract to the Engineer for approval. No additional payment will be made for a Contractor requested modification.

In the event the sum total of all work items for which traffic control and protection is required is increased or decreased by more than ten percent, the contract bid price for TRAFFIC CONTROL AND PROTECTION will be adjusted as follows:

Adjusted Contract Price= 0.25P + 0.75P [1±(X-0.1]

P = the contract price for TRAFFIC CONTROL AND PROTECTION (SPECIAL)

X= Difference between original and final value of work for which traffic control and protection is required. Original value of work for which traffic control and protection is required.

The value of the work items used in calculating the increase and decrease will include only items that have been added to or deducted from the contract under Article 104.02 of the "Standard Specifications" and only items that require the use of TRAFFIC CONTROL AND PROTECTION (SPECIAL).

In the event LCDOT cancels or alters any portion of the contract that result in the elimination or incompletion of any portion of the work, payment for partially completed work will be made according to Article 104.02 of the "Standard Specifications".

LIGHTING CONTROLLER, SPECIAL

Description: This work shall consist of furnishing and installing a Lighting Controller complete with all circuit breakers and appurtenances as shown on the plans, in accordance to NEC and as specified herein.

Location and orientation of the cabinet shall be coordinated with the Engineer prior to installing the foundation.

The lighting controller shall be installed on concrete foundation. The controller shall be mounted plumb and level on the foundation. The controller shall be fastened to the foundation with anchor rods using hot dipped galvanized or stainless steel nuts and washers. The base of the controller cabinet shall be caulked with silicone where it meets the foundation. All conduit entrances shall be sealed with a pliable waterproof material.

The controller cabinet shall be a single door type fabricated from 0.125 inch type 3003H14 aluminum. The cabinet shall have a vent designed to keep moisture, dirt and insects out. The cabinet door frame shall be double flanged on all four sides. All screws and hardware shall be plated, galvanized, or made of brass aluminum or stainless steel. One inch thick polyisocyanurate insulation shall be installed and permanently cemented on all sides of the cabinet and doors.

Cabinet shall be primed and painted as approved and specified by the Lake County Forest Preserve District. The cabinet door shall have a stainless steel name plate engraved with 0.75 inch high letters filled in black "LAKE COUNTY FOREST PRESERVE DISTRICT LIGHTING CONTROLS" unless otherwise specified.

The lighting controller shall have the components shown in the contract documents. The wires in the lighting controller are #12 A WG, 600V stranded. Components shall be sized properly for the given load.

The controller shall be constructed to U.L. standard 508 and bear the U.L. label "enclosed industrial control panel".

There shall be a ground field at the cabinet location as shown in the contract plans. The contractor shall verify the exact location of the ground field with the Engineer. The ground rods, anchor bolts and reinforcement steel shall be interconnected. The ground field installation including all labor, material and equipment shall be included in the cost of the lighting controller, special pay item.

Submittal of Drawings: The Contractor shall furnish, prior to any shop work or fabrication, complete and detailed drawings as to dimensions, type of material and method of fabrication for the control cabinet, equipment mounting panel, arrangement of equipment of panels, bus bar sizes, wire or cable sizes for connections between main breaker, automatic switches, photo electric cell, circuit breakers, H-0-A switch, all appurtenances as shown on the plans, and any other equipment as may be necessary for proper operation and control of the lighting system.

Basis of Payment: This work will be paid for at the contract unit price each for LIGHTING CONTROLLER, SPECIAL which price shall be payment in full for furnishing and placing Class "SI" concrete foundation with rigid steel conduit for cable entrance and grounding of equipment; Class "SI" concrete pad; furnishing and placing ground field, furnishing and placing fabricated cabinet complete with equipment panels and all necessary switch gear, appurtenances and wiring of same as indicated on the plans; furnishing, installing and connecting the photo-electric

cells, and shall include all labor, materials, tools and incidentals necessary to complete and test the operation of the control cabinet as herein specified and as shown on the plans.

PRECONSTRUCTION VIDEO TAPING

Effective: September 25, 2009

Description: This work shall consist of videotaping the project site prior to commencing construction activities in order to provide a basis to determine whether visible damage occurred during construction.

General: The work shall include videotaping on all streets within the project limits. The videotaping shall encompass the entire area between the right-of-way lines. Prior to videotaping the Contractor shall coordinate with the Engineer to insure that any areas of special emphasis are noted and sufficiently covered during the videotaping process.

The videotaping shall consist of a minimum of two passes. The videotaping shall be performed at a traversing speed not to exceed 50 feet per minute.

The recording shall include an audio track. The accompanying narrative shall note the condition of existing facilities and project site objects. The narrative shall also include address information.

The Contractor shall provide one copy of the recording in DVD format to the Engineer. The recording shall be of suitable photographic clarity to serve as a basis for establishing whether visible damage occurred during construction. The Contractor may not begin construction activities until the Engineer has approved the recording.

Basis of Payment: This work will be paid for at the contract lump sum price for PRECONSTRUCTION VIDEO TAPING. The contract lump sum price shall be payment in full for all materials, labor and equipment required to perform the videotaping as described herein.

3 RAIL SPLIT RAIL FENCE

Description: This work shall consist of furnishing and erecting a 3 rail split rail fence.

Material:

- A. Rails
 - 1. All fence rails shall be Jumbo Grade Split Western Red Cedar. Standard and Pony Grade rails shall not be accepted.
 - 2. All rails shall have a minimum girth of 14 inches and be 10 feet in length with cut tenon ends.
- B. Posts

- 1. All fence posts shall be Standard Grade Split Western Red Cedar with a minimum girth of 18 inches.
- 2. 2-rail fences, posts shall be a minimum of 64 inches in length;
- 3. 3-rail fences, posts shall be a minimum of 78 inches in length.
- 4. Posts shall be mortised for rail insertion and provided as end, line and corner posts as per the specific corresponding post location.
- C. Any fence components which do not meet these dimensional specifications, are structurally unsound, are severely misshapen or are in any way damaged, shall be replaced at no cost to the Owner.

Execution:

- A. All cedar split rail fence shall be installed at locations shown on the Plans.
- B. All cedar split rail fences shall be constructed in accordance with the dimensions and burial depths as shown in the Plans. The Contractor shall utilize the proper end, line or corner posts for the appropriate post location.
- C. Post holes shall be dug to a minimum diameter of 12 inches. Post hole depth shall be set to accommodate the finished dimensions as shown in the Plans, approximately 30 inches. The bottom of the post hole shall be undisturbed or compacted to minimize settlement.
- D. Any open post holes remaining at the end of each work day shall be covered or protected in such a manner as to minimize hazard to people, property and / or equipment.
- E. Posts shall be set plumb and in a straight alignment where indicated on the Plans. No posts shall be located on adjacent private or public properties.
- F. Posts shall be backfilled with the soils previously excavated or granular material in six-inch layers with each layer thoroughly compacted by tamping. All excess material shall be removed from the site.
- G. The Contractor shall guarantee the fence installation, including any movement of the posts from a plumb position and subsidence of the backfill, for a period of twelve (12) months from the date of acceptance.

Method of Measurement: 3-Rail Split Rail Fence will be measured for payment in place and in feet.

Basis of Payment: This work will be paid for at the contract unit price per foot for WOOD POST AND RAIL FENCE. The unit price shall include all equipment, materials and labor required to furnish and place the fence.

ORNAMENTAL RAILING

General: This work shall consist of furnishing and erecting ornamental railings in accordance with Section 509 of the Standard Specifications and the railing manufacturer's recommendations except as modified herein. The Ornamental Railing shall be fabricated and installed as detailed in the contract plans.

Submittal: The shop drawings shall be submitted to the resident engineer prior to ordering.

Material:

- A. Steel material for fence framework (i.e., tubular pickets, rails, and posts), when galvanized after forming, shall conform to the requirements of ASTM A1011/1011M, with a minimum yield strength of 50,000 psi (344MPa). The exterior shall be hot-dip galvanized with a 0.45 oz/ft² (138 g/m²) minimum zinc weight. The interior surface shall be coated with a minimum 81% nominal zinc pigmented coating, 0.3 mils (0.0076mm) minimum thickness.
- B. Steel material for fence framework (i.e., tubular pickets, rails, and posts), when galvanized prior to forming, shall conform to the requirements of ASTM A924/924M, with a minimum yield strength of 50,000 psi (344 MPa). The steel shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 0.90 oz/ft² (276 g/m²), Coating Designation G-90.
- C. The manufactured galvanized framework shall be subjected to a thermal stratification coating process (high-temperature, in-line, multi-stage, multi-layer) including, as a minimum, a six-stage pretreatment/wash (with zinc phosphate), an electrostatic spray application of an epoxy base, and a separate electrostatic spray application of a polyester finish. The base coat shall be a zinc-rich thermosetting epoxy powder coating (gray in color) with a minimum thickness of 2 mils (0.0508mm). The topcoat shall be a "no-mar" TGIC polyester powder coat finish with a minimum thickness of 2 mils (0.0508mm). The color is specified on the standard drawing included in the plans. The stratification-coated framework shall be capable of meeting the performance requirements for each quality characteristic shown in Table 1.

Quality Characteristics	ASTM Test Method	Performance Requirements
Adhesion	D3359-Method B	Adhesion (Retention of Coating) over 90% of test area (Tape and knife test).
Corrosion Resistance	B117 & D1654	Corrosion Resistance over 3,500 hours (Scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters)
Impact Resistance	D2794	Impact Resistance over 60 inch lb. (Forward impact using 0.625" ball).
Weathering Resistance	D822,D2244, D523(60° Method)	Weathering Resistance over 1,000 hours (Failure mode is 60% loss of gloss or color variance of more than 2 delta-E color units).

Table 1- Coating Performance Requirements

Fabrication:

- A. Pickets, rails, and posts shall be precut to specified lengths. Horizontal shall be prepunched to accept pickets.
- B. Grommets shall be inserted into the pre-punched holes in the rails and pickets shall be inserted through the grommets so that pre-drilled picket holes align with the internal upper raceway of the horizontal rails. (Note: This can best be accomplished by using an alignment template.) Retaining rods shall be inserted into each horizontal rail so that they pass through the predrilled holes in each picket, thus completing the panel assembly.
- C. Completed panels shall be capable of supporting a 600 lb. load (applied at midspan) without permanent deformation. Panels without rings shall be biasable to a 25% change in grade; panels with rings shall be biasable to a 12.5% change in grade.
- D. Gates shall be fabricated using the same components as the fence system. Panel material and gate ends having the same outside cross-section dimensions as the horizontal rail. All rail and upright intersections shall be joined by the welding. All picket and rail intersections shall also be joined either by welding or by the same retaining rod process used for panel assembly.

Measurement and payment:

Work shall include furnishing and installing ORNAMENTAL RAILING, including all railing connections. Payment shall be per lineal foot measured in place.

FLOCCULATION LOGS AND FLOCCULATION POWDER

Effective: January 1, 2007 Revised: August 1, 2011

Description: This work shall consist of furnishing and applying Flocculation Logs and/or Flocculation Powder on the project site to minimize soil erosion, bind soil particles, remove suspended particles, and act as a construction aide.

Materials: The polymer shall be a water soluble anionic polyacrylamide (PAM). PAMs are manufactured in various forms to be used on specific soil types. Using the wrong PAM may result in performance failures. All site specific soils shall be tested by a Certified Professional in Erosion and Sediment Control (CPESC) each time a PAM is used. The following measures shall be adhered to:

a) Toxicity: All vendors and suppliers of PAM, PAM mix, or PAM blends, shall supply a written toxicity report, which verifies that the PAM, PAM mix or PAM blends, exhibits acceptable toxicity parameters which meet or exceed the requirements for the State and Federal Water Quality Standards. <u>Cationic formulations of PAM, PAM blends,</u> <u>polymers or Chitosan are not allowed.</u>

- b) Performance: All vendors and suppliers of PAM, PAM mix or PAM blends shall supply written "site specific" testing results, demonstrating that a performance of 95% or greater of nephelometric turbidity units (NTU) or total suspended solids (TSS) is achieved from samples taken. In addition to soil testing, a CPESC shall design the installation plan for the polymers based on mix time and point of entry.
- c) Safety: PAM shall be mixed and/or applied according to all Occupational Safety and Health Administration (OSHA) material safety data sheet (MSDS) requirements and the manufacturer's recommendations for the specified use.

Construction Requirements:

<u>Flocculation Powder Dry Form Application</u>: Dry form powder may be applied by hand spreader or mechanical spreader. Pre-mixing of dry form PAM into fertilizer, seed or other soil amendments is allowed when approved by the CPESC. The application method shall insure uniform coverage of the target area. Application rates typically range from 10 - 18 pounds per acre.

<u>Flocculation Powder Hydraulically Applied Application</u>: PAM is typically used as part of hydraulically applied slurry containing at least mulch and seed to quickly establish vegetation (temporary or permanent). When used without seed, PAM provides temporary erosion protection for cut & fill surfaces. Application rates typically range from 10 - 18 pounds per acre.

<u>Flocculation Powder Installation constraints</u>: Flocculation Powder shall be applied to non-frozen soil surfaces, only. An unfrozen soil surface is defined as any exposed soil surface free of snow, standing water, ice crystals, etc.., which is comprised of discrete soil particles unbound to one another by surface or intestacy ice. The temperature shall be at least 40° F, when <u>hydraulically</u> applying the Flocculation Powder

<u>Flocculation Log Installation</u>: A Flocculation Log is a semi-hydrated polyacrylamide block that is placed within storm water and/or construction site drainage to remove fine particles and reduce NTU values. Placement of Flocculation Logs should be as close to the source of particle suspension as possible. Ideal performance of the Flocculation Logs occurs when the product is used in conjunction with other best management practices (BMPs). Each Flocculation Log is specifically formulated for the soil and water chemistry at the site. Soil and water samples will determine which formula Flocculation Log is needed. The samples will also aid in determining proper placement.

<u>Flocculation Products Maintenance plan</u>: As with any other BMP, this system will need to have a maintenance plan in place. The Contractor shall perform the following items as directed by the Engineer:

- 1. Reapplication of Flocculation Powder to disturbed areas
- 2. Reapplication of Flocculation Powder to temporary areas
- 3. Replacement of Flocculation Logs
- 4. Adjustments to the Storm Water Pollution Prevention Plan

Method of Measurement: An estimated quantity of Flocculation Logs is included in the summary of quantities to establish a unit price only. A typical dry log weighs about 10 pounds

and is approximately 5" x 4" x 12". Payment will be made based on the actual number of logs used. An estimated quantity of Flocculation Powder is included in the summary of quantities to establish a unit price only. Payment will be made based on the actual quantity (weight) of powder applied.

Basis of Payment: FLOCCULATION LOGS will be paid for at the contract unit price per each. FLOCCULATION POWDER will be paid for at the contract unit price per pound. Payment will be based on the actual number of logs and/or the actual weight of the powder used without a change in unit price because of adjustment in plan quantities, and no extra compensation will be allowed for any delays, inconveniences or damage sustained by the Contractor in performing the work. The unit price shall include all equipment, materials and labor required to furnish and apply flocculation logs and/or flocculation powder.

STAINING AND FINISHING CONCRETE STRUCTURES

Effective: January 1, 2007 Revised: January 1, 2012

Description: This work shall consist of staining exposed surfaces of form-lined concrete structures to replicate actual stone masonry.

It is intended that the stain shall match the colors and composition of the existing pedestrian underpass located at Fairfield Road, just south of IL Route 176 and just east of the Village of Wauconda, Illinois. Other similar pedestrian underpasses with stained form liner surfaces exist at IL Route 176 just west of Fairfield Road and at Gilmer Road approximately one mile north of IL Route 176, both also just west of the Village of Wauconda, Illinois. These other underpasses or portions thereof may also be referenced by the Owner to indicate the desired color composition and detailing that is required. This stain mix seeks to achieve the color variations present in similar natural limestone masonry constructions. Final coloration of the designated concrete surfaces shall accurately simulate the appearance of actual stone including multiple colors, shades, flecking, and veining. It shall also simulate the colors that may be present due to aging, staining, oxidation, rusting and/or organic staining from soil and vegetation. The work shall include staining of all form-lined walls and pilasters, including mortar joints.

Concrete Stain Products: The stain shall be a water-based solid color stain suitable for poured-in-place concrete such as that manufactured by H & C Concrete Stains, 101 Prospect Avenue N.W., Cleveland, Ohio 44115, www.hcconcrete.com, and distributed by Sherwin-Williams, Inc., or approved equal. The stain shall provide a low-luster finish that will not peel. flake or fade and is resistant to oil, gasoline, water and UV rays. The vehicle type shall be 100% acrylic and fortified with crystalline silica. The completed applications will require a minimum of five (5) different color selections to create the desired effect, including a base coat of 100% coverage, a secondary color of approximately 50-75% coverage to create depth, a mortar joint color and at least two highlight colors to imitate stone masonry. The stain shall have the following characteristics:

- 1) VOC (less exempt solvents) 224 g/L; 1.87 lb/gal
- 2) Water Vapor Transmission (ASTM D1653) 5.21 +/- 0.12 grains/(hr sg ft) 3) Perm Rating (ASTM D1653)
 - 11.2 + .3 grains/ (hr sg ft in Hg)

The stain shall meet the following performance requirements:

- 1) Accelerated Weathering / Color Change (ASTM G154) 3000 hrs /no effect
- 2) <u>Color & Gloss Retention (ASTM G90)</u> Color: Less than .30 Change
- Sheen: .5 difference @ 60 degrees 3) <u>Chloride Ion Penetration (ASTM T 259/T 260)</u> Reduction of 54% @ 0.0625-0.5" penetration, 83% @ 0.5-1.0" penetration and 36% @ 1.0-1.5" penetration
- 4) <u>Resistance to Wind Driven Rain (Rilem Tube Method # 11.4)</u> Zero water penetration over 60 minutes of exposure
- 5) <u>Resistance to Salt Spray (ASTM B117)</u> No film defect after 500 hours exposure
- 6) <u>Resistance to Sulfide Staining (ASTM D1712)</u> No change after 15 minutes
- 7) <u>Chemical Resistance (10% Sodium Hydroxide)</u> No softening or color change
- 8) Chemical Resistance (10% Ammonium Hydroxide) No softening or color change
- 9) <u>Mineral Spirits KB Value 38</u>
 10) <u>Impact Resistance (Fed Std 141A, Method 2051, ASTM D2794)</u>
 6 inch-pounds direct impact with no film chipping
- 11) <u>Flexibility (ASTM D522, Method B)</u> 1 inch diameter mandrel with no cracking 12) <u>Scrub Resistance</u> 1200 cycles with no failure
- 13) Adhesion (ASTM 3359) Method A X-Cut Tape Test: No film loss (Class 5A) Method B Cross-Cut Tape test: Less than 5% removed (Class 4B)

Finish Coating Products: The finish coating shall be Anti-Graffiti Coating B97-150 Series as manufactured by Sherwin-Williams Company, 101 Prospect Avenue N.W., Cleveland, Ohio 44115, <u>www.sherwin-williams.com/protective</u>, or approved equal. The finish coating shall be a clear, single-component, non-sacrificial, ready-to-use siloxane coating that cures with atmospheric moisture. It shall provide excellent graffiti resistance and cleanability via solvent wiping or power washing, UV resistance and adhesion. It shall have a semi-gloss finish. In Accelerated Weathering testing (ASTM D4587), it shall pass 4000 hours of QUV / multi-graffiti application and removal with a gloss retention of at least 63% and a color change of less than <3 delta E CIE *L a b. In Adhesion testing, it shall pass ASTM D6677.

Submittals and Sample Panel: Due to the Owner's intent to match the appearance of the existing structure referenced above, the Contractor shall inspect the existing structure with the Owner to determine the best choices for color selection and application techniques to achieve these goals. Upon approval of the form liner type, the Contractor shall submit a manufacturer's Product Data Sheet (PDS), Material Safety Data Sheet (MSDS) and color chip palette with specific color choices indicated for the color stain and a PDS and MSDS for the finish coating. The Contractor shall also provide a surface preparation and painting plan with documentation of the application method and equipment and applicator experience and qualifications. Upon approval of the concrete sample panel by others, the Contractor shall stain the cast concrete sample panel using the approved color selections and the appropriate techniques required to produce the appearance as desired by the Owner. The Contractor shall perform the staining and possible re-staining until the desired effect is achieved to the satisfaction of the Owner. No finish coating is required on the sample panel.

Execution: The Contractor shall strictly adhere to the manufacturer's recommendations, including those stated in the product PDS, in all facets of performing the work. These recommendations may include minimum concrete cure times, temperature, humidity and other weather restrictions, chemical etching of the raw concrete surfaces, surface power washing and cleaning and equipment selection and calibration. The color stains and finish coating shall only be applied with airless spray equipment unless otherwise authorized by the Engineer or Owner. The Contractor shall adequately protect adjacent surfaces from staining and finishing and shall clean the work area of all debris, materials and equipment when the Work is complete. Any surfaces, which have been damaged or splattered, shall be cleaned, restored, or replaced to the satisfaction of the Owner. No stain or finish coat shall be applied when wind-blown dust or debris is present or when work by others may compromise the finished work.

Method of Measurement: The exposed surfaces stained will be measured in place and the area computed in square yards.

Basis of Payment: This work will be paid for at the contract unit price per square yards for STAINING CONCRETE STRUCTURES. The unit price shall include all equipment, materials and labor required to stain and finish the exposed concrete surfaces.

OBSERVATION STRUCTURE

Description: This work shall consist of constructing an observation structure for field drain tile systems, including connecting to existing pipe drains (where applicable), installing risers, compacting a setting bed, setting adjusting ring and installing frame to finished grade.

Construction Requirements: The contractor shall saw cut the existing pipe drain, or remove the existing pipe drain to the nearest existing pipe joint in good condition. The pipe connection surface between the existing pipe and proposed pipes shall be constructed smooth and flush at the connection point. If the existing pipe drain is cracked or collapsed a full segment of the existing pipe drain shall be replaced to the nearest good condition joint upstream of the connection point shown on the plans. This pipe replacement work shall be included for up to one pipe segment. Rough, jagged, or irregular edges of the existing or proposed pipe drain shall not be accepted at the connection point.

The existing and proposed pipe drains shall be connected at a point of equal outside diameters. A connection to the pipe bell of the proposed pipe drain shall not be accepted. If necessary to create a consistent diameter connection the pipe bell on the proposed pipe drain may be removed at the connection point with a smooth saw cut. A pipe elbow/bend fitting shall be used to set the alignment of the proposed pipe drain downstream of the connection pipe stub. The pipe bell from the pipe bend fitting shall not be removed and the connection shall be made to a proposed pipe stub upstream of the fitting. The pipe bend fitting shall be included with this item.

Once a flush and smooth connection point of equal pipe diameters is set, the proposed pipe drain shall be laid to sit flush with the existing pipe drain stub. The proposed pipe drain shall be connected to the existing pipe drain with the use of a rubber band seal and mission couplings. The band seal shall over lap the edges of the existing and proposed pipes by a minimum of 12

inches and shall be centered on the pipe connection joint. The pipe joint shall be wrapped with geotextile fabric for a minimum of 12 inches on each side of the connecting band. A pipe elbow/bend fitting shall then be used downstream of the connection point to continue laying the proposed pipe drain on the new alignment. The location of the band seal connection shall not be substituted for the pipe bend fitting at the point of change in the pipe drain alignment. The engineer shall be notified to witness the final connection of the existing and proposed pipe drains prior to final backfill.

The risers shall be installed true and straight downstream of the connection point and on a straight run pipe alignment. Frames shall be set to the finished grade. All work shall be completed in accordance with the plan details. All work shall be completed in accordance with Lake County SMC requirements.

Upon completion of the connection to the existing pipe drain, the trench shall be backfilled and completed in accordance with the standard specifications for pipe drain trench article 601.03. This backfill work shall be included.

Basis of Payment: The work will be paid for at the contract unit price per each for OBSERVATION STRUCTURE (EXISTING DRAIN TILE). The unit price shall include all material, labor, equipment and any other items required to complete the observation structure.

LUMINAIRE (SPECIAL)

Description: This work shall consist of furnishing and installing a luminaire according to details shown in the contract plans and as herein specified.

The underpass luminaire shall be complete with all supports, hardware, and appurtenant mounting accessories. The unit shall be heavy duty and shall have no indentations or crevices in which dirt, salt, or other corrosives may collect.

The underpass luminaire shall be round, wall mounted, embedded architectural style luminaire. The recess housing of the luminaire shall be available in advance of the luminaire shipment. Each luminaire shall be installed according to manufacturer's recommendation. The luminaire shall be 70 watt pulse start metal halide, wired for 120 volt with at least 5,500 initial lumens. The luminaire manufacturers shall be Cooper Lighting Fail-Safe TRF 15, Kenall Millenium Round MR17CSR series, or Morlite Defiant II DFII-DBR-WO-70MH-C.

Cooper Lighting Fail-Safe TRF 15 luminaire:

- Terrapin product
- 15" diameter
- Four Quadrant style
- Opal lens
- Multi-tap (wired for 120V)
- Black finish
- Regress concrete pour housing

Kenall Millenium Round MR17CSR:

- MR17CSR series
- 17" (lens) diameter round full face with cross (18.2" diameter overall)
- Pour in place mounting type
- Pearlescent polycarbonate lens
- Matte black finish
- 120 volt

Morlite Defiant II DFII-DBR-WO-70MH-C:

- Defiant II decorative wall mount series
- Deep back box recessed mounting plate
- White opal lens
- 1 70W MH Lamp

The casting for the luminaire shall have conduit entry points. If a reducer is needed at the conduit entry point, a reducer shall be provided and all material, equipment and labor necessary to attach the reducer to the fixture shall be included in this pay item.

Basis of Payment. This item shall be paid for at the contract unit price per each for LUMINAIRE (SPECIAL), which price shall include all material, labor and equipment necessary to perform the work in accordance to the standard specifications, the plan documentations and as herein specified.

LUMINAIRE

Effective: January 1, 2012

Add the following to first paragraph of Article 1067(c) of the Standard Specifications:

"The reflector shall not be altered by paint or other opaque coatings which would cover or coat the reflecting surface. Control of the light distribution by any method other than the reflecting material and the aforementioned clear protective coating that will alter the reflective properties of the reflecting surface is unacceptable"

Add the following to Article 1067(f) of the Standard Specifications:

"The ballast shall be a High Pressure Sodium, high power factor, constant wattage auto-regulator, lead type (CWA) for operation on a nominal 240 volt system."

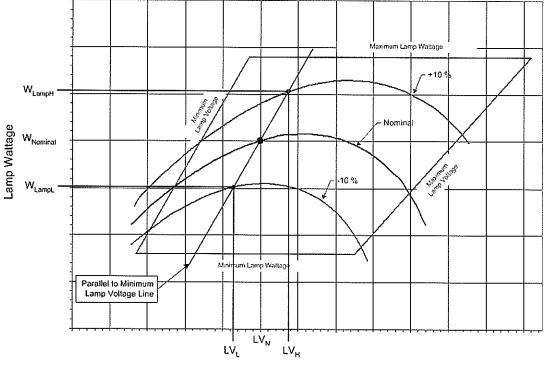
Revise Article 1067(f)(1) of the Standard Specifications to read:

"The high pressure sodium, auto-regulator, lead type (CWA) ballast shall be designed to ANSI Standards and shall be designed and rated for operation on a nominal 240 volt system. The ballast shall provide positive lamp ignition at the input voltage of 216 volts. It shall operate the lamp over a range of input voltages from 216 to 264 volts without damage to the ballast. It shall provide lamp operation

within lamp specifications for rated lamp life at input design voltage range. Operating characteristics shall produce output regulation not exceeding the following values:

Nominal Ballast Wattage	Maximum Ballast Regulation
750	25%
400	26%
310	26%
250	26%
150	24%
70	18%

For this measure, regulation shall be defined as the ratio of the lamp watt difference between the upper and lower operating curves to the nominal lamp watts; with the lamp watt difference taken within the ANSI trapezoid at the nominal lamp operating voltage point parallel to the minimum lamp volt line:



Lamp Voltage (LV)

Route: FAU 178 Wilson Road Underpass Section: 14-F3000-02-BT County: Lake Contract No. 63808

Ballast Regulation =
$$\frac{W_{LampH} - W_{LampL}}{W_{LampN}} \times 100$$

where:

W_{LampH} = lamp watts at +10% line voltage when Lamp voltage = LV _H	
W_{LampL} = lamp watts at - 10% line voltage when lamp voltage = LV _L	
W_{lampN} = lamp watts at nominal lamp operating voltage = LV_N	

Wattage	Nominal Lamp Voltage, LV _N	LVL	LV _H
750	120v	115v	125v
400	100v	95v	105v
310	100v	95v	105v
250	100v	95v	105v
150	55v	50v	60v
70	52v	47v	57v

Ballast losses, based on cold bench tests, shall not exceed the following values:

Nominal Ballast Wattage	Maximum Ballast Losses
750	15%
400	20%
310	21%
250	24%
150	26%
70	34%

Ballast losses shall be calculated based on input watts and lamp watts at nominal system voltage as indicated in the following equation:

Ballast Losses =
$$\frac{W_{Line} - W_{Lamp}}{W_{Lamp}} \times 100$$

where: W_{line} = line watts at nominal system voltage W_{lamp} = lamp watts at nominal system voltage Ballast output to lamp. At nominal system voltage and nominal lamp voltage, the ballast shall deliver lamp wattage with the variation specified in the following table.

Nominal Ballast Wattage	Output to lamp variation
750	± 7.5%
400	± 7.5%
310	± 7.5%
250	± 7.5%
150	± 7.5%
70	± 7.5%

Example: For a 400w luminaire, the ballast shall deliver 400 watts \pm 7.5% at a lamp voltage of 100v for the nominal system voltage of 240v which is the range of 370w to 430w.

Ballast output over lamp life. Over the life of the lamp the ballast shall produce average output wattage of the nominal lamp rating as specified in the following table. Lamp wattage readings shall be taken at 5-volt increments throughout the ballast trapezoid. Reading shall begin at the lamp voltage (L_V) specified in the table and continue at 5 volt increments until the right side of the trapezoid is reached. The lamp wattage values shall then be averaged and shall be within the specified value of the nominal ballast rating. Submittal documents shall include a tabulation of the lamp wattage vs. lamp voltage readings.

Nominal Ballast Wattage	LV Readings begin at	Maximum Wattage Variation
750	110v	± 7.5%
400	90v	± 7.5%
310	90v	± 7.5%
250	90v	± 7.5%
150	50v	± 7.5%
70	45v	± 7.5%

Example: For a 400w luminaire, the averaged lamp wattage reading shall not exceed the range of $\pm 7.5\%$ which is 370w to 430w"

Add the following to Article 1067(h) of the Standard Specifications:

"Independent Testing. Independent testing of luminaires shall be required whenever the pay item quantity of luminaires of a given pay item, as indicated on the plans, is 50 or more. For each luminaire type to be so tested, one luminaire plus one luminaire for each 50 luminaires shall be tested. Example: *A plan pay*

item quantity of 75 luminaires for a specific pay item would dictate that 2 be tested; 135 luminaires would dictate that three be tested." If the luminaire performance table is missing from the contract documents, the luminaire(s) shall be tested and the test results shall be evaluated against the manufacturer's data as provided in the approved material submittal. The test luminaire(s) results shall be equal to or better than the published data. If the test results indicated performance not meeting the published data, the test luminaire will be designated as failed and corrective action as described herein shall be performed.

The Contractor shall be responsible for all costs associated with the specified testing, including but not limited to shipping, travel and lodging costs as well as the costs of the tests themselves, all as part of the bid unit price for this item. Travel, lodging and other associated costs for travel by the Engineer shall be direct-billed to or shall be pre-paid by the Contractor, requiring no direct reimbursement to the Engineer or the independent witness, as applicable"

The Contractor shall select one of the following options for the required testing with the Engineer's approval:

- a. Engineer Factory Selection for Independent Lab: The Contractor may select this option if the luminaire manufacturing facility is within the state of Illinois. The Contractor shall propose an independent test laboratory for approval by the Engineer. The selected luminaires shall be marked by the Engineer and shipped to the independent laboratory for tests.
- b. Engineer Witness of Independent Lab Test: The Contractor may select this option if the independent testing laboratory is within the state of Illinois. The Engineer shall select, from the project luminaires at the manufacturer's facility or at the Contractor's storage facility, luminaires for testing by the independent laboratory.
- c. Independent Witness of Manufacturer Testing: The independent witness shall select from the project luminaires at the manufacturers facility or at the Contractor's storage facility, the luminaires for testing. The Contractor shall propose a qualified independent agent, familiar with the luminaire requirements and test procedures, for approval by the Engineer, to witness the required tests as performed by the luminaire manufacturer.

The independent witness shall as a minimum meet the following requirements:

- Have been involved with roadway lighting design for at least 15 years.
- Not have been the employee of a luminaire or ballast manufacturer within the last 5 years.
- Not associated in any way (plan preparation, construction or supply) with the particular project being tested.
- Be a member of IESNA in good standing.
- Provide a list of professional references.

This list is not an all inclusive list and the Engineer will make the final determination as to the acceptability of the proposed independent witness.

d. Engineer Factory Selection and Witness of Manufacturer Testing: The Contractor may select this option if the luminaire manufacturing facility is within the state of Illinois. At the Manufacturer's facility, the Engineer shall select the luminaires to be tested and shall be present during the testing process. The Contractor shall schedule travel by the Engineer to and from the Manufacturer's laboratory to witness the performance of the required tests.

Should any of the tested luminaires fail to satisfy the specifications and perform according to approved submittal information, the luminaire shall be unacceptable and be replaced by alternate equipment meeting the specifications with the submittal and testing process repeated in their entirety; or corrections made to achieve required performance. In the case of corrections, the Contractor shall advise the Engineer of corrections made and shall request a repeat of the specified testing and, if the corrections are deemed reasonable by the Engineer, the testing process shall be repeated. The number of luminaires to be tested shall be the same quantity as originally tested; i.e. if three luminaires were tested originally, one, two or three failed, another three must be tested after corrective action is taken.

Revise Article 1067.06(a)(1) of the Standard Specifications to read:

"The lamps shall be of the clear type and shall have a color of 1900° to 2200° Kelvin."

Add the following table(s) to Article 1067 of the Standard Specifications:

GIVEN CONDITIONS		
ROADWAY DATA	Pavement Width	10 (ft)
		2 (Bikepath)
	I.E.S. Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA	Mounting Height	N/A (ft)
	Mast Arm Length	N/A (ft)
	Pole Set-Back From Edge of Pavement	N/A (ft)
LUMINAIRE DATA	Lamp Type	HPS
	Lamp Lumens	
	I.E.S. Vertical Distribution	Medium
	I.E.S. Control Of Distribution	Cutoff
	I.E.S. Lateral Distribution	Type I
	Total Light Loss Factor	
LAYOUT DATA	Spacing	(ft)
	– Configuration	Single Sided
	Luminaire Overhang over edge of pavement	(ft)

IDOT DISTRICT 1 LUMINAIRE PERFORMANCE TABLE

NOTE: Variations from the above specified I.E.S. 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.

LUMINANCE	Average Luminance, L _{AVE}	Cd/m ²
	Uniformity Ratio, L _{AVE} /L _{MIN}	(Max)
	Uniformity Ratio, L _{MAX} /L _{MIN}	(Max)
	Veiling Luminance Ratio, L _v /L _{ave}	(Max)

FORM LINER TEXTURED SURFACE, SPECIAL

Effective: January 1, 2007 Revised: August 1, 2011

Description: This work will consist of providing a textured finish on exposed cast-in-place or precast concrete surfaces.

Materials: The materials shall meet the requirements of Article 503.02 of the "Standard Specifications" and the following:

The patterning of the form liner shall appear natural and non-repeating. Seam lines or match lines caused from two or more molds coming together will not be apparent when viewing the final wall.

The molds shall not compress more than ¼ inch when concrete is poured at a rate of ten vertical feet per hour. The molds shall be removable without causing any deterioration of the surface or the underlying concrete.

The forms shall be constructed so that the completed concrete structures conform to the shape, lines and dimensions of the components of the approved pattern. The forms shall be properly braced or tied together to maintain position and shape. The forms shall be made sufficiently tight to prevent leakage of the mortar. The formwork shall have the strength and stability to ensure the finished concrete dimensions are within the tolerances specified herein.

The Lake County Forest Preserves District has pre-approved the following form liner suppliers and patterns for the textured surface:

Manufacturer	Location	Pattern No.	Pattern Name
Custom Rock Formliner 2020 West 7 th Street St. Paul, MN 55116 (651) 699-1345 http://customrock.com	Wingwalls/Retaining Walls	Pattern No. 12005	Bearpath Coursed Stone
Greenstreak 3400 Tree Court Industrial Blvd. St. Louis, Missouri 63122-6614 (800) 325-9504 www.greenstreak.com	Wingwalls/Retaining Walls	Pattern No. 477	Meramec Dry Stack

Custom Rock Formliner 2020 West 7 th Street St. Paul, MN 55116 (651) 699-1345	Concrete Pilaster	T324	¾" Natural Limestone
http://customrock.com			

The form ties shall be made of either metal or fiberglass. Metal ties, which result in a portion of the tie permanently embedded in the concrete, shall be designed to separate at least one inch back from the finished surface, leaving only a neat hole that can be plugged with patching material. The Contractor shall submit the type of form ties to the Engineer, for approval prior to use in this work,

The joints shall be colored to simulate real mortar.

Class SI concrete used for cast-in-place structures shall contain a high range water-reducing admixture meeting the requirements of Article 1021.03(c) of the "Standard Specifications" to obtain a 5" – 7" slump.

Sample Panel: The Contractor shall select a form liner pattern from above or propose an equivalent form liner. The form liner shall meet the requirements of Article 503.06(a) and the following:

For a proposed equivalent the Contractor shall submit to the Engineer one specification and catalog cut sheet for the style(s) of architectural form liner proposed for use on the project. Note that the same style of form liner shall be used on all surfaces within the project limits. The submittal shall be made no later than 14 calendar days from the date of notification to proceed with the contract. Upon receipt of the information, the Engineer, in consultation with Lake County Division of Transportation (LCDOT) and other local government agencies will have 30 calendar days to approve and notify the Contractor of which style of form liner is to be used on the project.

Upon receipt of notification of the style of form liner to be used or if the Contractor is proposing a form liner from the pre-approved list, he/she shall submit a proposed procedure for obtaining the simulated finish. The procedure shall include plans and details for the form liner pattern and dimensions, and be submitted for the Engineer's approval no later than 30 calendar days from the date of notification of approval of the style type. If such plans and details are not satisfactory to the Engineer and LCDOT, the Contractor shall make any changes as may be required by the Engineer or LCDOT at no additional cost to the Department.

Upon approval of the form liner plans and details, the Contractor shall submit a 3' by 3' (minimum) sample concrete panel of the simulated stone masonry finish. The sample panel shall be delivered and positioned on the job site at a location to be determined by the Engineer. The sample shall also include the concrete stain if it is included in the contract.

General: The work shall be performed according to Article 503.06 of the "Standard Specifications" and the following:

The form liners shall be installed according to the manufacturers' recommendations to achieve the highest quality concrete appearance possible. The form liners shall withstand the concrete placement pressures without leakage, physical or visual defects.

The Contractor shall clean the form liners, removing any buildup prior to each use. The Contractor shall inspect each form for blemishes or tears and make repairs as needed following manufacturer's recommendations.

The Contractor shall install the form liners with less than ¼ inch separation between them. The molds shall be attached securely to the forms following manufacturer's recommendations. The panels shall be attached to each other with flush seams and seams filled as necessary to eliminate visible evidence of seams in the cast concrete.

The liner butt joints shall be blended into the pattern so as to eliminate visible vertical or horizontal seams and conspicuous form butt joint marks. The liner joints shall fall within pattern joints or reveals. The finished textures shall be continuous without visual disruption and properly aligned over adjacent and multiple liner panels. Continuous or single liner panels shall be used where liner joints may interrupt the intended pattern. Panel remnants shall not be pieced together.

The Contractor shall notify the Engineer at least 48 hours prior to placing concrete. Concrete shall not be placed until the Engineer has inspected the formwork and the placement of reinforcing bars for compliance with the plans.

The Contractor shall apply the form release agent to all surfaces of the form liner which will come in contact with concrete, according to the manufacturers' recommendations.

The Contractor shall employ proper consolidation methods to ensure the highest quality finish. Internal vibration shall be achieved with a vibrator of appropriate size, the highest frequency, and low - moderate amplitude. Concrete placement shall be in lifts not to exceed 1.5 feet. Internal vibrator operation shall be at appropriate intervals and depths and withdrawn slowly enough to assure a minimal amount of surface air voids and the best possible finish without causing segregation. An external form vibrator may be required to assure the proper results. The use of an external form vibrator must be approved by the form liner manufacturer and the Department.

The Contractor shall coordinate concrete pours to prevent visible differences between individual pours or batches. Concrete pours shall be continuous between construction or expansion joints. Cold joints shall not occur within continuous form liner pattern fields.

The form liners shall be stripped between 12 and 24 hours as recommended by the manufacturer. When stripping the forms the Contractor shall avoid creating defects in finished surface.

Wall ties shall be coordinated with the liner and form to achieve the least visible result. Place form ties at thinnest points of molds (high points of finished wall). Neatly patch the remaining hole after disengaging the protruding portion of the tie so that it will not be visible after coloring the concrete surface.

Where an expansion joint must occur at a point other than at mortar or rustication joints, such as at the face of concrete texture, which is to have the appearance of stone, consult manufacturer for proper treatment of expansion material.

Curing methods shall meet the requirements of Article 1020.13 of the "Standard Specifications" and be compatible with the desired aesthetic result. The use of curing compounds will not be allowed. No rubbing of flat areas or other repairs should be required after the form removal. The finished exposed formed concrete surfaces shall be free of visible vertical seams, horizontal seams, and butt joint marks. Grinding and chipping of finished formed surfaces shall be avoided.

Method of Measurement: Form Liner Textured Surfaces will be measured for payment in place and the area computed in square feet.

Basis of Payment: This work will be paid for at the contract unit price per square feet for FORM LINER TEXTURED SURFACE, SPECIAL. The unit price shall include all equipment, materials and labor required to complete the textured surface on the exposed concrete surface.

UNDERGROUND CONDUIT, PVC COATED GALVANIZED STEEL, 2 1/2" DIA.

Revise the first paragraph of Article 811.03(a) of the Standard Specifications to read:

"General. Rigid metal conduit installation shall be according to Article 810.05(a). Conduits terminating in junction and pull boxes shall be terminated with insulated and gasketed watertight threaded NEMA 4X conduit hubs. The hubs shall be Listed under UL 514B. The insulated throat shall be rated up to 105° C. When PVC coated conduit is utilized, the aforementioned hubs shall also be PVC coated."

Add the following to Article 811.03(b) of the Standard Specifications:

"Where PVC coated conduit is utilized, all conduit fittings, couplings and clamps shall be PVC coated. All other mounting hardware and appurtenances shall be stainless steel."

"The personnel installing the PVC coated conduit must be trained and certified by the PVC coated conduit Manufacturer or Manufacturer's representative to install PVC coated conduit. Documentation demonstrating this requirement must be submitted for review and approval."

Add the following to Article 1088.01(a) of the Standard Specifications:

All iron and steel products, which are to be incorporated into the work, including conduit and all conduit fittings, shall be domestically manufactured or produced and fabricated as specified in Article 106."

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

- "a. PVC Coated Steel Conduit. The PVC coated rigid metal conduit shall be UL Listed (UL 6). The PVC coating must have been investigated by UL as providing the primary corrosion protection for the rigid metal conduit. Ferrous fittings for general service locations shall be UL Listed with PVC as the primary corrosion protection. Hazardous location fittings, prior to plastic coating shall be UL listed.
- b. The PVC coating shall have the following characteristics:

Hardness:	85+ Shore A Durometer
Dielectric Strength:	400V/mil @ 60 Hz
Aging:	1,000 Hours Atlas Weatherometer
Temperature	The PVC compound shall conform at 0° F. to Federal Specifications PL-406b, Method 2051, Amendment 1 of 25 September 1952 (ASTM D 746)
Elongation:	200%

- c. The exterior and interior galvanized conduit surface shall be chemically treated to enhance PVC coating adhesion and shall also be coated with a primer before the PVC coating to ensure a bond between the zinc substrate and the PVC coating. The bond strength created shall be greater than the tensile strength of the plastic coating.
- d. The nominal thickness of the PVC coating shall be 1 mm (40 mils). The PVC exterior and urethane interior coatings applied to the conduit shall afford sufficient flexibility to permit field bending without cracking or flaking at temperatures above -1°C (30°F).
- e. An interior urethane coating shall be uniformly and consistently applied to the interior of all conduit and fittings. This internal coating shall be a nominal 2 mil thickness. 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.
- f. Conduit bodies shall have a tongue-in-groove gasket for maximum sealing capability. The design shall incorporate a positive placement feature to assure proper installation. Certified test results confirming seal performance at 15 psig (positive) and 25 in. of mercury (vacuum) for 72 hours shall be submitted for review when requested by the Engineer.
- g. The PVC conduit shall pass the following tests:

Exterior PVC Bond test RN1:

Two parallel cuts 13 mm (1/2 inch) apart and 40 mm (1 1/2 inches) 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 PVC coating for 13 mm (1/2 inch) to free the coating from the metal.

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

<u>Boil Test:</u>

Acceptable conduit coating bonds (exterior and interior) shall be confirmed if there is no disbondment after a minimum average of 200 hours in boiling water or exposure to steam vapor at one atmosphere. Certified test results from a national recognized independent testing laboratory shall be submitted for review and approval. The RN1 Bond Test and the Standard Method for Measuring Adhesion by Tape Test shall be utilized.

Exterior Adhesion. In accordance with ASTM D870, a 6" length of conduit test specimen shall be placed in boiling water. The specimen shall be periodically removed, cooled to ambient temperature and immediately tested according to the bond test (RN1). When the PVC coating separates from the substrate, the boil time to failure in hours shall be recorded.

Interior Adhesion. In accordance with ASTM D3359, a 6" conduit test specimen shall be cut in half longitudinally and placed in boiling water or directly above boiling water with the urethane surface facing down. The specimen shall be periodically removed, cooled to ambient temperature and tested in accordance with the Standard Method of Adhesion by Tape Test (ASTM D3359). When the coating disbonds, the time to failure in hours shall be recorded.

Heat/Humidity Test:

Acceptable conduit coating bonds shall be confirmed by a minimum average of 30 days in the Heat and Humidity Test. The RN1 Bond Test and the Standard Method for Measuring Adhesion by Tape Test shall be utilized.

Exterior Adhesion. In accordance with ASTM D1151, D1735, D2247 and D4585, conduit specimens shall be placed in a heat and humidity environment where the temperature is maintained at

150°F (66°C) and 95% relative humidity. The specimens shall be periodically removed and a bond test (RN1) performed. When the PVC coating separates from the substrate, the exposure time to failure in days shall be recorded.

Interior Adhesion. In accordance with ASTM D3359, conduit specimens shall be placed in a heat and humidity environment where the temperature is maintained at 150°F (66°C) and 95% relative humidity. When the coating disbonds, the time to failure in hours shall be recorded.

Add the following to Article 1088.01(a)(4) of the Standard Specifications:

"All liquid tight flexible metal conduit fittings shall have an insulated throat to prevent abrasion of the conductors and shall have a captive sealing O-ring gasket. The fittings shall be Listed under UL 514B. The insulated throat shall be rated up to 105° C."

Revise the second paragraph of Article 811.04 of the Standard Specifications to read:

"Expansion fittings and LFNC will not be measured for payment."

Revise Article 811.05 of the Standard Specifications to read:

"811.05 Basis of Payment: This work will be paid for at the contract unit price per foot for UNDERGROUND CONDUIT, PVC COATED GALVANIZED STEEL, 2 ½" DIA."

STABILIZED CONSTRUCTION ENTRANCE

Description: This work shall consist of constructing a stabilized construction entrance, including furnishing, installing, maintaining and removing a stabilized pad of aggregate underlain with filter fabric, as shown on the plans or directed by the Engineer.

Materials: The materials used shall meet the requirements of the following:

Aggregate: The aggregate shall be limited to IDOT Coarse Aggregate Gradation CA-1.

Filter Fabric: The filter fabric shall be made of synthetic polymers composed of at least 85 percent by weight polypropylene, polyesters, polyamides, polyethylene, polyolefins, or polyvinylidene-chlorides. The geotextile shall be free of any chemical treatment or coating that significantly reduces its porosity. Fibers shall contain stabilizers and/or inhibitors to enhance resistance to ultraviolet lights.

Construction Requirements: The aggregate shall be at least six inches thick. The aggregate shall not be placed until the entrance area has been inspected and approved by the Engineer.

The aggregate shall be dumped and spread into place in approximately horizontal layers. The layer(s) shall not exceed three feet in thickness. The aggregate shall be placed in such a manner as to produce a reasonably homogeneous stable fill that contains no segregated pockets of larger or smaller fragments or large unfilled space caused by bridging of larger fragments. No compaction shall be required beyond that resulting form the placing and spreading operations.

The construction entrance shall have a minimum width of 14 feet and a minimum length of 50 feet.

All surface water flowing or diverted toward the construction entrance shall be piped across the entrance. Any pipe used for this will be considered included in the unit price for STABILIZED CONSTRUCTION ENTRANCE. The stabilized construction entrance shall have positive drainage away from the roadway.

The entrance shall remain in place and be maintained until the disturbed area is stabilized. Any sediment spilled onto public right-of-way(s) shall be removed immediately. All removed materials shall be disposed of outside the limits of the right-of-way according to Article 202.03 of the "Standard Specifications" and/or as directed by the Engineer.

Method of Measurement: The Stabilized Construction Entrance will be measured in place and the area computed in square yards.

Basis of Payment: The work will be paid for at the contract unit price per square yard for STABILIZED CONSTRUCTION ENTRANCE. The unit price shall include all material, labor, equipment and any other items required to complete the construction entrance.

CONSTRUCTION LAYOUT

Effective: January 1, 2007 Revised: July 23, 2012

Description: This work shall consist of furnishing and placing construction layout stakes for the project.

• **General:** The Lake County Division of Transportation (LCDOT) or Consultant on their behalf (LCDOT) will provide adequate reference points to the centerline of survey and bench marks as shown on the plans and listed herein. Any additional points set by LCDOT will be identified in the field to the Contractor and all field notes will be kept in the office of the Engineer.

The Contractor shall provide the necessary field forces, equipment, and material required to set all the additional stakes for this project. The additional stakes shall include stakes needed to establish offset stakes, reference points, and any other horizontal or vertical controls. The additional stakes will also include any supplementary bench marks necessary to secure a correct layout of the work. Stakes for line and grade of pavement and/or curb and gutter shall be set at sufficient station intervals (not to exceed 50 feet) to assure substantial conformance to plan lines and grades. The Contractor shall not be required to set additional stakes to locate a utility line which is not included as a pay item in the contract or to determine property lines between private properties.

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

Responsibilities of LCDOT:

a) LCDOT will provide adequate reference points to the centerline of all roads and streets except interchange ramps. The centerline of private entrances and short street intersection returns may not be located or referenced.

Locating and referencing the centerline of the survey will consist of establishing and providing coordinates for the alignment points of the centerline(s) e.g. PC's, PT's, and POT's necessary to provide line of sight; and/or traverse points as are necessary to to establish said centerlines and provide line of sight.

- b) Bench marks will be established along the project outside of construction lines not exceeding intervals of 1000 feet horizontally and 20 feet vertically.
- c) Stakes set for a) and b) above will be identified in the field to the Contractor.
- d) LCDOT will make random checks of the Contractor's staking to determine if the work is in conformance with the plans. Where the Contractor's work will tie into work that is being or will be done by others, checks will be made to determine if the work is in conformance with the proposed overall grade and horizontal alignment.
- e) LCDOT will set stakes to assist with utility adjustments and/or for building fences along the right of way line by parties other than the Contractor.
- f) LCDOT will make all measurements and take all cross sections from which the various pay items will be measured.
- g) Where the Contractor, in setting construction stakes, discovers discrepancies, LCDOT will check to determine their nature and make whatever revisions are necessary on the plans, including the re-cross sectioning of the area involved. Any additional re-staking required by the Engineer will be the responsibility of the Contractor. Additional re-

staking done by the Contractor will be paid for according to Article 109.04 of the "Standard Specifications".

- h) LCDOT will accept responsibility for the accuracy of the initial control points as provided herein.
- It is not the responsibility of LCDOT, except as provided herein, to check the correctness of the Contractor's stakes; any apparent errors will be called to the Contractor's attention as soon as discovered and he/she shall be required to make the necessary correction before the stakes are used for construction purposes.
- j) Where the plan quantities for excavation are to be used as the final pay quantities, LCDOT will make sufficient checks to determine if the work has been completed in conformance with the plan cross sections.

Responsibilities of the Contractor:

a) The Contractor shall establish from the given survey points and bench marks all the control points necessary to construct the individual project elements. The Contractor shall provide the Engineer adequate control in close proximity to each individual element to allow adequate checking of construction operations. This includes, but is not limited to: line and grade stakes, line and grade nails in form work, and/or filed or etched marks in substantially completed construction work.

Prior to staking, the Contractor shall run a check of all the benchmarks and control points provided, to determine if any adjustments are necessary due to frost or isolated damage. The Contractor shall provide any adjustment information to the Engineer.

It is the Contractor's responsibility to tie in centerline control points in order to preserve them during construction operations.

It is the contractor's responsibility to set right-of-way and easement stakes (including changes in right-of-way width and beginning/ending easement stations) prior to the Installation of Perimeter Erosion Barrier or the disturbance of any soil. These stakes shall be set at 100 foot station intervals and maintained throughout the project.

- b) At the completion of the grading operations, the Contractor shall set stakes at 100 foot station intervals along each profile grade line. These stakes will be used for final cross sectioning by the LCDOT.
- c) The Contractor shall locate the right-of-way points for the installation of right-of-way markers. The Contractor shall set all line stakes for the construction of fences by the Contractor.
- d) All work shall be according to normally accepted self-checking surveying practices. Field notes shall be kept in standard survey field notebooks and electronic staking

reports. Copies of the books and electronic reports shall be given to LCDOT at the completion of the project. All notes shall be neat, orderly, and in accepted form.

e) For highway structure staking, the Contractor shall use diligent care and appropriate accuracy. Points shall be positioned to allow reuse throughout the construction process. Prior to the beginning of construction activities, all structure centerlines and pier lines are to be established by the Contractor and checked by the Engineer. The Contractor shall provide a detailed structure layout drawing showing span dimensions, staking lines, and offset distances.

Basis of Payment: This work will be paid for at the contract lump sum price for CONSTRUCTION LAYOUT. The unit price shall include all equipment, materials and labor required to furnish and place the construction layout stakes.

DUST CONTROL WATERING

Effective: August 1, 2011

Description: This work shall consist of furnishing and applying water to control dust and airborne dirt generated by construction activities.

General: This work shall be performed according to Article 107.36 of the "Standard Specifications" and the following:

Revise Article 107.36 of the "Standard Specifications" as follows:

Replace sub-paragraph (d) of under the third paragraph with the following:

(d) Dust shall be controlled by the uniform application of sprinkled water and shall be applied only when directed and in a manner approved by the Engineer. All equipment used for this work shall meet with the Engineer's approval and shall be equipped with adequate measuring devices for determining the exact amount of water discharged. All water used shall be properly documented by ticket or other approved means.

The Contractor is reminded of the provisions of Article 107.18 of the "Standard Specifications" regarding the procurement of water from fire hydrants.

Method of Measurement: This work will be measured in units of gallons of water applied. One unit is equivalent to 1,000 gallons of water applied.

Basis of Payment: This work will be paid for at the contract unit price per unit for DUST CONTROL WATERING. *The unit price shall include all equipment, materials and labor required to control dust.*

TEMPORARY INFORMATION SIGNING

Effective: November 13, 1996 Revised: January 2, 2007

Description: This work shall consist of furnishing, installing, maintaining, relocating for various states of construction and eventually removing temporary informational signs. Included in this item may be ground mount signs, skid mount signs, truss mount signs, bridge mount signs, and overlay sign panels which cover portions of existing signs.

Materials: Materials shall be according to the following Articles of Section 1000 - Materials:

	ltem	Article/Section
a.)	Sign Base (Notes 1 & 2)	1090
b.)	Sign Face (Note 3)	1091
c.)	Sign Legends	1092
d.)	Sign Supports	1093
e.)	Overlay Panels (Note 4)	1090.02

- Note 1. The Contractor may use 5/8 inch (16 mm) instead of 3/4 inch (19 mm) thick plywood.
- Note 2. Type A sheeting can be used on the plywood base.
- Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.
- Note 4. The overlay panels shall be 0.08 inch (2 mm) thick.

GENERAL CONSTRUCTION REQUIREMENTS

Installation: The sign sizes and legend sizes shall be verified by the Contractor prior to fabrication.

Signs which are placed along the roadway and/or within the construction zone shall be installed according to the requirements of Article 701.14 and Article 720.04. The signs shall be 7 ft (2.1 m) above the near edge of the pavement and shall be a minimum of 2 ft (600 mm) beyond the edge of the paved shoulder. A minimum of two (2) posts shall be used.

The attachment of temporary signs to existing sign structures or sign panels shall be approved by the Engineer. Any damage to the existing signs due to the Contractor's operations shall be repaired or signs replaced, as determined by the Engineer, at the Contractor's expense.

Signs which are placed on overhead bridge structures shall be fastened to the handrail with stainless steel bands. These signs shall rest on the concrete parapet where possible. The Contractor shall furnish mounting details for approval by the Engineer.

Method Of Measurement: This work shall be measured for payment in square feet (square meters) edge to edge (horizontally and vertically).

All hardware, posts or skids, supports, bases for ground mounted signs, connections, which are required for mounting these signs will be included as part of this pay item.

Basis Of Payment: This work shall be paid for at the contract unit price per square foot (square meter) for TEMPORARY INFORMATION SIGNING.

TEMPORARY PAVEMENT

Effective: March 1, 2003 Revised: April 10, 2008

Description: This work shall consist of constructing a temporary pavement at the locations shown on the plans or as directed by the engineer.

The contractor shall use either Portland cement concrete according to Sections 353 and 354 of the Standard Specifications or HMA according to Sections 355, 356, 406 of the Standard Specifications, and other applicable HMA special provisions as contained herein. The HMA mixtures to be used shall be specified in the plans. The thickness of the Temporary Pavement shall be as described in the plans. The contractor shall have the option of constructing either material type if both Portland cement concrete and HMA are shown in the plans.

Articles 355.08 and 406.11 of the Standard Specifications shall not apply.

The removal of the Temporary Pavement, if required, shall conform to Section 440 of the Standard Specification.

Method of Measurement: Temporary pavement will be measured in place and the area computed in square yards (square meters).

Basis of Payment: This work will be paid for at the contract unit price per square yard (square meter) for TEMPORARY PAVEMENT and TEMPORARY PAVEMENT (INTERSTATE).

Removal of temporary pavement will be paid for at the contract unit price per square yard (square meter) for PAVEMENT REMOVAL.

CONCRETE WASHOUT FACILITY

Description: The Contractor shall take sufficient precautions to prevent pollution of streams, lakes, reservoirs, and wetlands with fuels, oils, bitumens, calcium chloride, or other harmful materials according to Article 107.23 of the "Standard Specifications".

General: To prevent pollution by residual concrete and/or the byproduct of washing out the concrete trucks, concrete washout facilities shall be constructed and maintained on any project which includes cast-in-place concrete items. The concrete washout shall be constructed, maintained, and removed according to this special provision and LCDOT standard LC4202

included in these plans. Concrete washout facilities shall be required on all projects regardless of the need for NPDES permitting. On projects requiring NPDES permitting, concrete washout facilities shall also be addressed in the Storm Water Pollution Prevention Plan.

The concrete washout facility shall be constructed on the job site according to LC4202. The Contractor may elect to use a pre-fabricated portable concrete washout structure. The Contractor shall submit a plan for the concrete washout facility, to the Engineer for approval, a minimum of 10 calendar days before the first concrete pour. The working concrete washout facility shall be in place before any delivery of concrete to the site. The Contractor shall ensure that all concrete washout activities are limited to the designated area.

The concrete washout facility shall be located no closer than 50 feet from any environmentally sensitive areas, such as water bodies, wetlands, and/or other areas indicated on the plans. Adequate signage shall be placed at the washout facility and elsewhere as necessary to clearly indicate the location of the concrete washout facility to the operators of concrete trucks. The concrete washout facility shall be adequately sized to fully contain the concrete washout needs of the project. The contents of the concrete washout facility shall not exceed 75% of the facility capacity. Once the 75% capacity is reached, concrete placement shall be discontinued until the facility is cleaned out. Hardened concrete shall be removed and properly disposed of outside the right-of-way. Slurry shall be allowed to evaporate, or shall be removed and properly disposed of outside the right-of-way. The Contractor shall immediately replace damaged basin liners or other washout facility components to prevent leakage of concrete waste from the washout facility. Concrete washout facilities shall be inspected by the Contractor after each use. Any and all spills shall be reported to the Engineer and cleaned up immediately. The Contractor shall remove the concrete washout facility when it is no longer needed.

Basis of Payment: The cost of all materials required and all labor necessary to comply with the above will not be paid for separately, but shall be considered as included in the unit bid prices of the contract, and no additional compensation will be allowed.

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

Effective: August 1, 2012

Revised: February 1, 2014

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

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

Participation pursuant to IDOT's requirements by the Contractor or subcontractor in this Training Program Graduate (TPG) Special Provision entitles the Contractor or subcontractor to be reimbursed at \$15.00 per hour for training given a certified TPG on this contract. As approved by the Department, reimbursement will be made for training persons as specified herein. This reimbursement will be made even though the Contractor or subcontractor may receive additional training program funds from other sources for other trainees, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving other reimbursement. For purposes of this Special Provision the Contractor is not relieved of requirements under applicable federal law, the Illinois Prevailing Wage Act, and is not eligible for other training fund reimbursements in addition to the Training Program Graduate (TPG) Special Provision reimbursement.

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

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

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

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for certified TRAINEES TRAINING PROGRAM GRADUATE. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

The Contractor shall provide training opportunities aimed at developing full journeyworker in the type of trade or job classification involved. The initial number of TPGs for which the incentive is available under this contract is 2. During the course of performance of the Contract the Contractor may seek approval from the Department for additional incentive eligible TPGs. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the TPGs are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this Special Provision. The Contractor shall also insure that this Training Program Graduate Special Provision is made applicable to such subcontract if the TPGs are to be trained by a subcontractor and that the incentive payment is passed on to each subcontractor.

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

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

Training and upgrading of TPGs of IDOT pre-apprentice training programs is intended to move said TPGs toward journeyman status and is the primary objective of this Training Program Graduate Special Provision. Accordingly, the Contractor shall make every effort to enroll TPGs by recruitment through the IDOT funded TPG programs to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance and entitled to the Training Program Graduate Special Provision \$15.00 an hour incentive.

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



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 + (217) 782-2829

217/782-0610

04/23/2014

Lake County Forest Preserve District Jeff Sloot 1899 West Winchester Road Libertyville, IL, IL 60048

RE: FACILITY: Millenium Trail - Wilson Road underpass Round Lake, IL COUNTY: LAKE NPDES Permit No:ILR10S202 Notice of Coverage Under Construction Site Activity Storm Water General Permit

Dear NPDES Permittee:

We have reviewed your application and determined that storm water discharges associated with industrial activity from construction sites are appropriately covered by the attached General NPDES Permit issued by the Agency. Your discharge is covered by this permit effective as of the date of this letter or as identified by the conditions of the permit. The Permit as issued covers application requirements, a storm water pollution prevention plan and reporting requirements.

As a Permit Holder, it is your responsibility to:

- 1. Submit a modified Notice of Intent of any ownership or address change to the Permit Section within 30 days;
- <u>A Notice of Termination</u> must be sent to the Agency, at the address indicated on the Notice of Termination, once your construction project has been <u>completed and the site is properly stabilized</u>. A Notice of Termination form has been enclosed for your convenience;

This letter shows your facility permit number below the construction site name. Please save this number and reference it in all future correspondence. Should you have any questions concerning the Permit, please contact Melissa Parrott at (217) 782-0610.

Very truly yours,

Alan Keller, P.E.

Manager, Permit Section Division of Water Pollution Control

CC: Records Unit Lake County SWCD, Region: DesPlaines

4302 H. Main St., Rociferd, E. 61103 (815)927-7760 595 S. State, Egin, R. 60123 (847)608-3131 2125 S. Fart St., Champolgn, R. 61820 (217)278-5800 2009 Mali St., Collemilie, R. 62234 (618)346-3120 9511 Harrison St., Des Piolines, & 60616 (847)294-4000 5407 N. University St., Arbor 113, Peoria, & 51614 (509)693-5462 2309 W. Main St., Sche 116, Marton, & 62959 (618)995-7200 100 W. Rondelph, Sale 11-300, Chicago, & 60601 (812)814-6026

PLEASE PROTION RECYCLES PAPER

106

NPDES Permit No. ILR10

General NPDES Permit No. ILR10

Illinois Environmental Protection Agency Division of Water Pollution Control 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276 www.epa.state.il.us

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

General NPDES Permit For Storm Water Discharges From Construction Site Activities

Expiration Date:

July 31, 2018

Issue Date: July 30, 2013 Effective Date: August 1, 2013

In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 III. Adm. Code, Subtitle C, Chapter I), and the Clean Water Act, and the regulations thereunder the following discharges are authorized by this permit in accordance with the conditions and attachments herein.

an Keller

Alan Keller, P.E. Manager, Permit Section Division of Water Pollution Control

Part I. COVERAGE UNDER THIS PERMIT

- A. Permit Area. The permit covers all areas of the State of Illinois with discharges to any waters of the State.
- B. Eligibility.
 - 1. This permit shall authorize all discharges of storm water associated with industrial activity from a construction site that will result in the disturbance of one or more acres total land area or a construction site less than one acre of total land that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb one or more acres total land area. This permit may authorize discharges from other construction site activities that have been designated by the Agency as having the potential to adversely affect the water quality of waters of the state. This permit also authorizes discharges from construction sites previously approved by the Agency under the previous version of ILR10 that are still occurring after the effective date of this permit, except for discharges identified under Part I.B.3 (Limitations on Coverage). Where discharges from construction sites were initially covered under the previous version of the ILR10, the Storm Water Pollution Prevention Plan must be updated/revised as necessary to ensure compliance with the provisions of this reissued ILR10 permit in accordance with Part II.A.2.
 - This permit may only authorize a storm water discharge associated with Industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:
 - a. the industrial source other than construction is located on the same site as the construction activity;
 - storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
 - c. storm water discharges associated with industrial activity from the areas of the site where industrial activities other than construction are occurring (including storm water discharges from dedicated asphalt plants and dedicated concrete plants) are covered by a different NPDES general permit or an individual permit authorizing such discharges.
 - 3. Limitations on Coverage. The following storm water discharges from construction sites are not authorized by this permit:
 - storm water discharges associated with industrial activities that originate from the site after construction activities have been completed and the site has undergone final stabilization;
 - b. discharges that are mixed with sources of non-storm water other than discharges identified in Part III.A (Prohibition on Non-Storm Water Discharges) of this permit and in compliance with paragraph IV.D.5 (Non-Storm Water Discharges) of this permit;

NPDES Permit No. ILR10

- c. storm water discharges associated with industrial activity that are subject to an existing NPDES individual or general permit or which are issued a permit in accordance with Part VI.N (Requiring an Individual Permit or an Alternative General Permit) of this permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric limitations for such discharges;
- storm water discharges from construction sites that the Agency has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard; and
- e. storm water discharges that the Agency, at its discretion, determines are not appropriately authorized or controlled by this general permit.
- f. storm water discharges to any receiving water specified under 35 III. Adm. Code 302.105(d) (6).

C. Authorization,

- In order for storm water discharges from construction sites to be authorized to discharge under this general permit a discharger must submit a Notice of Intent (NOI) in accordance with the requirements of Part II below, using an NOI form provided by the Agency.
- 2. Where a new contractor is selected after the submittal of an NOI under Part II below, or where site ownership is transferred, a new Notice of Intent (NOI) must be submitted by the owner in accordance with Part II.
- Unless notified by the Agency to the contrary, dischargers who submit an NOI in accordance with the requirements of this permit are authorized to discharge storm water from construction sites under the terms and conditions of this permit in 30 days after the date the NOI is received by the Agency.
- The Agency may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information.

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification.

- To receive authorization under this general permit, a discharger must submit a completed Notice of Intent (NOI) in accordance with Part VI.G (Signatory Requirements) and the requirements of this Part in sufficient time to allow a 30 day review period after the receipt of the NOI by the Agency and prior to the start of construction. The completed NOI may be submitted electronically to the following email address: epa.constilr10swpp@illinois.gov
- 2. Discharges that were covered by the previous version of ILR10 are automatically covered by this permit. Where discharges associated with construction activities were initially covered under the previous version of ILR10 and are continuing, the Storm Water Pollution Prevention Plan must be updated/revised within 12 months of the effective date of this reissued permit, as necessary to ensure compliance with the provisions of the reissued ILR10. Updating of the SWPPP is not required if construction activities are completed and a Notice of Termination is submitted within 12 months of the effective date of this permit.
- A discharger may submit an NOI in accordance with the requirements of this Part after the start of construction. In such instances, the Agency may
 bring an enforcement action for any discharges of storm water associated with industrial activity from a construction site that have occurred on or
 after the start of construction.
- B. Failure to Notify. Dischargers who fail to notify the Agency of their intent to be covered, and discharge storm water associated with construction site activity to Waters of the State without an NPDES permit are in violation of the Environmental Protection Act and Clean Water Act.
- C. Contents of Notice of Intent. The Notice of Intent shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit by all of the entities identified in paragraph 2 below and shall include the following information:
 - The mailing address, and location of the construction site for which the notification is submitted. Where a mailing address for the site is not available, the location can be described in terms of the latitude and longitude of the approximate center of the facility to the nearest 15 seconds, or the nearest quarter section, (if the section, township and range is provided) that the construction site is located in;
 - 2. The owner's name, address, telephone number, and status as Federal, State, private, public or other entity;
 - 3. The name, address and telephone number of the general contractor(s) that have been identified at the time of the NOI submittal;
 - The name of the receiving water(s), or if the discharge is through a municipal separate storm sewer, the name of the municipal operator of the storm sewer and the ultimate receiving water(s);
 - 5. The number of any NPDES permits for any discharge (including non-storm water discharges) from the site that is currently authorized by an NPDES permit;
 - A description of the project, detailing the complete scope of the project, estimated timetable for major activities and an estimate of the number of acres of the site on which soil will be disturbed;
 - 7. For projects that have complied with State law on historic preservation and endangered species prior to submittal of the NOI, through coordination with the Illinois Historic Preservation Agency and the Illinois Department of Natural Resources or through fulfillment of the terms of interagency agreements with those agencies, the NOI shall indicate that such compliance has occurred.
 - 8. An electronic copy of the storm water pollution prevention plan that has been prepared for the site in accordance with Part IV of this permit. The electronic copy shall be submitted to the Agency at the following email address: epa.constilr10swppp@illinois.gov

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- Revised notice of intents shall be submitted for any substantial modifications to the project such as: address changes, new contractors, area coverage, additional discharges to waters of the state, or other substantial modifications.
- D. Where to Submit.

Construction activities which discharge storm water that requires a NPDES permit must use an NOI form provided by the Agency. The applicable fee shall also be submitted. NOIs must be signed in accordance with Part VI.G (Signatory Requirements) of this permit. The NOI form may be submitted to the Agency in any of the following methods:

1. File electronically with digital signature at the following website address: http://dataservices.epa.illinois.gov/SWConstructionPermit/bowLogin.aspx

Registration specific to the permittee is required in order to file electronically.

Submit complete NOI and SWPPP electronically to the following email address: <u>epa.constilr10swppp@illinois.gov</u>. Submit the NOI with
original signature and fee by certified mail to the Agency at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control, Mail Code #15 Attention: Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

- E. Additional Notification. Construction activities that are operating under approved local sediment and erosion plans, land disturbance permits, grading plans, or storm water management plans, in addition to filing copies of the Notice of Intent in accordance with Part D above, shall also submit signed copies of the Notice of Intent to the local agency approving such plans in accordance with the deadlines in Part A above. See Part IV.D.2.d (Approved State or Local Plans). A copy of the NOI shall be sent to the entity holding an active General NPDES Permit No. ILR40 if the permittee is located in an area covered by an active ILR40 permit.
- F. Notice of Termination. Where a site has completed final stabilization and all storm water discharges from construction activities that are authorized by this permit are eliminated, the permittee must submit a completed Notice of Termination that is signed in accordance with Part VI.G (Signatory Requirements) of this permit.
 - 1. The Notice of Termination shall include the following information:
 - a. The mailing address, and location of the construction site for which the notification is submitted. Where a mailing address for the site is not available, the location can be described in terms of the latitude and longitude of the approximate center of the facility to the nearest 15 seconds, or the nearest quarter section (if the section, township and range is provided) that the construction site is located in;
 - b. The owner's name, address, telephone number, and status as Federal, State, private, public or other entity;
 - c. The name, address and telephone number of the general contractor(s);
 - d. The date when construction was completed and the site was stabilized; and
 - e. The following certification signed in accordance with Part VI.G (Signatory Requirements) of this permit:

"I certify under penalty of law that all storm water discharges associated with construction site activity from the identified facility that are authorized by NPDES general permit ILR10 have otherwise been eliminated. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with construction site activity by the general permit, and that discharging pollutants in storm water associated with construction site activity to Waters of the State is unlawful under the Environmental Protection Act and Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act."

For the purposes of this certification, elimination of storm water discharges associated with industrial activity means that all disturbed soils at the identified facility have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all storm water discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have otherwise been eliminated.

2. All Notices of Termination are to be sent to the Agency to the mailing address in Part II.D.1, using the form provided by the Agency, or electronically if the permittee submitted a Notice of Intent by electronic means.

Part III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS

- A. Prohibition on Non-Storm Water Discharges.
 - 1. Except as provided in Part I paragraph B.2 and paragraphs 2, 3 or 4 below, all discharges covered by this permit shall be comprised entirely of storm water.
 - 2. a. Except as provided in paragraph b below, discharges of materials other than storm water must be in compliance with a NPDES permit (other than this permit) issued for the discharge.

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- b. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharges is in compliance with Part IV.D.5 (Non-Storm Water Discharges): discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles where detergents are not used; waters used to control dust; potable water sources including uncontaminated waterline flushings; landscape irrigation drainages; routine external building washdown which does not use detergents; pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; uncontaminated air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.
- 3. The following non-storm water discharges are prohibited by this permit: concrete and wastewater from washout of concrete (unless managed by an appropriate control), drywall compound, wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps, solvents, or detergents, toxic or hazardous substances from a spill or other release, or any other pollutant that could cause or tend to cause water pollution.
- 4. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are allowable if managed by appropriate controls.
- B. Discharges into Receiving Waters With an Approved Total Maximum Daily Load (TMDL):

Discharges to waters for which there is a TMDL allocation for sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation) are not eligible for coverage under this permit unless the owner/operator develops and certifies a SWPPP that is consistent with wasteload allocations in the approved TMDL. To be eligible for coverage under this general permit, operators must incorporate into their SWPPP any conditions and/or Best Management Practices applicable to their discharges necessary for consistency with the TMDL within any timeframes established in the TMDL. If a specific numeric waste load allocation has been established that would apply to the project's discharges, the operator must incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation.

Please refer to the Agency website at: http://www.epa.state.il.us/water/tmdl/report-status.html

C. Discharges covered by this permit, alone or in combination with other sources, shall not cause or contribute to a violation of any applicable water quality standard.

Part IV. STORM WATER POLLUTION PREVENTION PLANS

A storm water pollution prevention plan shall be developed for each construction site covered by this permit. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with construction site activity from the facility. In addition, the plan shall describe and ensure the implementation of compliance with the terms and conditions of this permit. The permittee_must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

A. Deadlines for Plan Preparation and Compliance.

The plan shall:

- 1. Be completed prior to the start of the construction activities to be covered under this permit and submitted electronically to the Agency at the time the Notice of Intent is submitted; and
- 2. Provide for compliance with the terms and schedules of the plan beginning with the initiation of construction activities.

B. Signature, Plan Review and Notification.

- The plan shall be signed in accordance with Part VI.G (Signatory Requirements), and be retained at the construction site which generates the storm water discharge in accordance with Part VI.E (Duty to Provide Information) of this permit.
- 2. Prior to commencement of construction, the permittee shall provide the plan to the Agency.
- 3. The permittee shall make plans available upon request from this Agency or a local agency approving sediment and erosion plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system. A list of permitted municipal separate storm sewer systems is available at: http://www.epa.state.il.us/water/permits/storm-water/ms4-status-report.pdf
- 4. The Agency may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this part. Within 7 days from receipt of notification from the Agency, the permittee shall make the required changes to the plan and shall submit to the Agency a written certification that the requested changes have been made. Failure to comply shall terminate authorization under this permit.
- A copy of the letter of notification of coverage along with the General NPDES Permit for Storm Water Discharges from Construction Site Activities or other indication that storm water discharges from the site are covered under an NPDES permit shall be posted at the site in a prominent place for public viewing (such as alongside a building permit).
- 6. All storm water pollution prevention plans and all completed inspection forms/reports required under this permit are considered reports that shall be available to the public at any reasonable time upon request. However, the permittee may claim any portion of a storm water pollution prevention plan as confidential in accordance with 40 CFR Part 2.
- C. Keeping Plans Current. The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to Waters of the State and which has not otherwise been addressed in the plan or if the

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storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under paragraph D.2 below, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction site activity. In addition, the plan shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the storm water pollution prevention plan. Amendments to the plan may be reviewed by the Agency in the same manner as Part IV.B above. Any revisions of the documents for the storm water pollution prevention plan shall be kept on site at all times.

- D. Contents of Plan. The storm water pollution prevention plan shall include the following items:
 - Site Description. Each plan shall provide a description of the following:
 - a. A description of the nature of the construction activity or demolition work;
 - A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils, on-site or off-site stockpiling, activities which disturb soils for major portions of the site (e.g. clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils, on-site or off-site stockpiling, activities which disturb soils for major portions of the site (e.g. clearing, grubbing, excavation, grading, on-site or off-site stockpiling).
 - An estimate of the total area of the site and the total area of the site that is expected to be disturbed by clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils and storage of materials, or other activities;
 - An estimate of the runoff coefficient of the site after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;
 - e. A site map indicating drainage patterns and approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking, areas of soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, locations of on-site or offsite soil stockpiling or material storage, surface waters (including wetlands), and locations where storm water is discharged to a surface water; and
 - f. The name of the receiving water(s) and the ultimate receiving water(s), and areal extent of wetland acreage at the site.
 - 2. Controls. Each plan shall include a description of appropriate controls that will be implemented at the construction site and any off-site stockpile or storage area, The Illinois Urban Manual <u>www.aiswcd.org/IUM</u> or other similar documents shall be used for developing the appropriate management practices, controls or revisions of the plan. The plan will clearly describe for each major activity identified in paragraph D.1 above, appropriate controls and the timing during the construction process that the controls will be implemented. For example, perimeter controls for one portion of the site will be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining perimeter control. Temporary perimeter controls will be removed after final stabilization. The description of controls shall address as appropriate the following minimum components:
 - a. Erosion and Sediment Controls. The permittee shall design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:
 - (i) Control storm water volume and velocity within the site to minimize soil erosion;
 - Control storm water discharges, including both peak flowrates and total storm water volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion;
 - (iii) Minimize the amount of soil exposed during construction activity;
 - (iv) Minimize the disturbance of steep slopes;
 - (v) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
 - (vi) Provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible; and
 - (vii) Minimize soil compaction and, unless infeasible, preserve topsoil.
 - b. Stabilization Practices. The storm water pollution prevention plan shall include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where practicable and that disturbed portions of the site are stabilized. Stabilization practices may include: temporarily seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, staged or staggered development, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated, shall be included in the plan. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization of disturbed areas must be initiated within 1 working day of permanent or temporary cessation of earth disturbing activities and shall be completed as soon as possible but not later than 14 days from the initiation of stabilization work in an area. Exceptions to these time frames are specified as provided in paragraphs (i) and (ii) below:
 - (i) Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - (ii) On areas where construction activity has temporarily ceased and will resume after 14 days, a temporary stabilization method can be used. Temporary stabilization techniques and materials shall be described in the SWPPP.
 - c. Structural Practices. A description of structural practices utilized to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include sill fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree practicable. The installation of these devices may be subject to Section 404 of the CWA.

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- (i) The following design requirements apply to sediment basins if such structural practices will be installed to reduce sediment concentrations in storm water discharges:
 - a. When discharging from the sediment basin, utilize outlet structures that withdraw water from the surface in order to minimize the discharge.
 - Prevent erosion of the sediment basin using stabilization controls (e.g., erosion control blankets), at the inlet and outlet using erosion controls and velocity dissipation devices:
 - Sediment basins shall be designed to facilitate maintenance, including sediment removal from the basins, as necessary.
- d. Use of Treatment Chemicals. Identify the use of all polymer flocculants or treatment chemicals at the site. Dosage of treatment chemicals shall be identified along with any information from any Material Safety Data Sheet. Describe the location of all storage area for chemicals. Include any information from the manufacturer's specifications. Treatment chemicals must be stored in areas where they will not be exposed to precipitation. The SWPPP must describe procedures for use of treatment chemicals and staff responsible for use/application of treatment chemicals must be trained on the established procedures.
- e. Best Management Practices for Impaired Waters. For any site which discharges directly to an impaired water identified on the Agency's website for 303(d) listing for suspended solids, turbidity, or siltation the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations or the Illinois Urban Manual, the storm water pollution prevention plan shall adhere to a more restrictive design criteria. Please refer to the Agency's website at: (http://www.epa.state.il.us/water/tmdl/303d-list.html)
- f. Pollution Prevention. The permittee shall design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:
 - Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
 - (ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to storm water; and
 (iii) Minimize the displacement of activities and other materials present on the site to precipitation and to storm water; and
 - (iii) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.
- g. Other Controls.
 - (i) Waste Disposal. No solid materials, including building materials, shall be discharged to Waters of the State, except as authorized by a Section 404 permit.
 - (ii) The plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, senitary sewer or septic system regulations.
 - (iii) For construction sites that receive concrete or asphalt from off-site locations, the plan must identify and include appropriate controls and measures to reduce or eliminate discharges from these activities.
 - (iv) The plan shall include spill response procedures and provisions for reporting if there are releases in excess of reportable quantities.
- h. Best Management Practices for Post-Construction Storm Water Management. Describe the 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. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Permittees are responsible for only the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with industrial activity have been eliminated from the site.
 - (i) The storm water pollution prevention plan and design and construction plans shall explicitly consider post-construction storm water management. Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). The Permittee must plan for and put in place storm water BMPs to retain the greatest amount of post-development storm water runoff practicable given the site and project constraints by installing one or more of the Best Management Practices (BMPs) as described in the Illinois Urban Manual.

The storm water pollution prevention plan shall include an explanation of the technical basis used to select the practices to control pollution where post-construction flows will exceed predevelopment levels.

- (ii) Velocity dissipation devices shall 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).
- (iii) Unless otherwise specified in the Illinois Urban Manual (2012), the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.
- i. Approved State or Local Plans.
 - (i) The management practices, controls and other provisions contained in the storm water pollution prevention plan must be at least as protective as the requirements contained in the Illinois Urban Manual, 2012. Construction activities which discharge storm water must include in their storm water pollution prevention plan procedures and requirements specified in applicable sediment and erosion control plans or storm water management plans approved by local officials. Requirements specified in sediment and erosion control plans or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under this permit, incorporated by reference and are enforceable under this permit. The plans shall include all requirements of this permit and include more stringent standards required by any local

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approval. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit that is issued for the construction site.

- (ii) Dischargers seeking alternative permit requirements are not authorized by this permit and shall submit an individual permit application in accordance with 40 CFR 122.26 at the address indicated in Part II.D (Where to Submit) of this permit, along with a description of why requirements in approved local plans or permits should not be applicable as a condition of an NPDES permit.
- 3. Maintenance.
 - a. The plan shall include a description of procedures to maintain in good and effective operating conditions, all erosion and sediment control measures and other Best Management Practices, including vegetation and other protective measures identified in the Storm Water Pollution Prevention Plan.
 - b. Where a basin has been installed to control sediment during construction activities, the Permittees shall keep the basin(s) in effective operating condition and remove accumulated sediment as necessary.
- 4. Inspections. Qualified personnel (provided by the permittee) shall inspect disturbed areas of the construction site that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm or by the end of the following business or work day that is 0.5 inches or greater. Qualified personnel means a person knowledgeable in the principles and practices of erosion and sediment controls measures, such as a licensed Professional Engineer (P.E.), a Certified Professional in Erosion and Sediment Control (CPESC), a Certified Erosion Sediment and Storm Water Inspector (CESSWI) or other knowledgeable person who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activities.
 - a. Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.
 - b. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
 - c. Based on the results of the inspection, the description of potential pollutant sources identified in the storm water pollution prevention plan in accordance with Part IV.D.1 (Site Description) of this permit and the pollution prevention control measures identified in the plan in accordance with Part IV.D.2 (Controls) of this permit shall be revised as appropriate as soon as practicable after such inspection to minimize the potential for such discharges. Such modifications shall provide for timely implementation of any changes to the plan and pollution prevention control measures within 7 calendar days following the inspection.
 - d. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph b above shall be made and retained as part of the storm water pollution prevention plan for at least three years from the date that the permit coverage expires or is terminated. All inspection reports shall be retained at the construction site. The report shall be signed in accordance with paragraph with Part VI.G (Signatory Requirements) of this permit.
 - e. The permittee shall notify the appropriate Agency Field Operations Section office by email at: <u>epa.swnoncomp@illinois.gov</u>, telephone or fax within 24 hours of any incidence of noncompliance for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. The permittee shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. Submission shall be on forms provided by the Agency and 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. Corrective actions must be undertaken immediately to address the identified noncompliance issue(s).
 - f. All reports of noncompliance shall be signed by a responsible authority as defined in Part VI.G (Signatory Requirements).
 - g. After the initial contact has been made with the appropriate Agency Field Operations Section Office, all reports of noncompliance shall be mailed to the Agency at the following address:

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

- 5. Non-Storm Water Discharges. Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2 of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and insure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.
- E. Additional requirements for storm water discharges from industrial activities other than construction, including dedicated asphalt plants, and dedicated concrete plants. This permit may only authorize any storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:
 - 1. The industrial source other than construction is located on the same site as the construction activity:

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- 2. Storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
- 3. Storm water discharges associated with industrial activity from the areas of the site where industrial activity other than construction are occurring (including storm water discharges from dedicated asphalt plants [other than asphalt emulsion facilities] and dedicated concrete plants) are in compliance with the terms, including applicable NOI or application requirements, of a different NPDES general permit or individual permit authorizing such discharges.

F. Contractors.

- 1. The storm water pollution prevention plan must clearly identify for each measure identified in the plan, the contractor(s) or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in paragraph 2 below in accordance with Part VI.G (Signatory Requirements) of this permit. All certifications must be included in the storm water pollution prevention plan except for owners that are acting as contractors.
- Certification Statement. All contractors and subcontractors identified in a storm water pollution prevention plan in accordance with paragraph 1
 above shall sign a copy of the following certification statement before conducting any professional service at the site identified in the storm water
 pollution prevention plan:

"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."

The certification must include the name and title of the person providing the signature in accordance with Part VI.G of this permit: the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

Part V. RETENTION OF RECORDS

- A. The permittee shall retain copies of storm water pollution prevention plans and all reports and notices required by this permit, records of all data used to complete the Notice of Intent to be covered by this permit and the Agency Notice of Permit Coverage letter for a period of at least three years from the date that the permit coverage expires or is terminated. This period may be extended by request of the Agency at any time.
- B. The permittee shall retain a copy of the storm water pollution prevention plan and any revisions to said plan required by this permit at the construction site from the date of project initiation to the date of final stabilization.

Part VI. STANDARD PERMIT CONDITIONS

- A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Illinois Environmental Protection Act and the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Failure to obtain coverage under this permit or an individual permit for storm water releases associated with construction activities is a violation of the Illinois Environmental Protection Act and the CWA.
- B. Continuation of the Expired General Permit. This permit expires five years from the date of issuance. An expired general permit continues in force and effect until a new general permit or an individual permit is issued. Only those construction activities authorized to discharge under the expiring general permit are covered by the continued permit.
- C. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. Duty to Provide Information. The permittee shall furnish within a reasonable time to the Agency or local agency approving sediment and erosion control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, any information which is requested to determine compliance with this permit. Upon request, the permittee shall also furnish to the Agency or local agency approving sediment and erosion control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, any information which is requested to control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, copies of all records required to be kept by this permit.
- F. Other Information. When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Agency, he or she shall promptly submit such facts or information.
- G. Signatory Requirements. All Notices of Intent, storm water pollution prevention plans, reports, certifications or information either submitted to the Agency or the operator of a large or medium municipal separate storm sewer system, or that this permit requires be maintained by the permittee, shall be signed.
 - 1. All Notices of Intent shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (2) any person authorized to sign documents that has been assigned or delegated said authority in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer

having responsibility for the overall operations of a principal geographic unit of the agency.

- 2. All reports required by the permit and other information requested by the Agency shall be signed by a person described above or by a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Agency.
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
 - c. Changes to Authorization. If an authorization under Part I.C (Authorization) is no longer accurate because a different individual or position has responsibility for the overall operation of the construction site, a new authorization satisfying the requirements of Part I.C must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.
 - d. Certification. Any person signing documents under this Part shall make the following certification:

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

- H. Penalties for Falsification of Reports. Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. Section 44(j)(4) and (5) of the Environmental Protection Act provides that any person who knowingly makes any false statement, representation, or certification in an application form, or form pertaining to a NPDES permit commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed \$10,000 for each day of violation.
- I. Penalties for Falsification of Monitoring Systems. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the CWA. The Environmental Protection Act provides that any person who knowingly renders inaccurate any monitoring device or record required in connection with any NPDES permit or with any discharge which is subject to the provisions of subsection (f) of Section 12 of the Act commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed \$10,000 for each day of violation.
- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the CWA.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
- M. Transfers. This permit is not transferable to any person except after notice to the Agency. The Agency may require the discharger to apply for and obtain an individual NPDES permit as stated in Part I.C (Authorization).
- N. Requiring an Individual Permit or an Alternative General Permit.
 - 1. The Agency may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. Where the Agency requires a discharger authorized to discharge under this permit to apply for an individual NPDES permit, the Agency shall notify the discharger in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative submitted to the Agency indicated in Part II.D (Where to Submit) of this permit. The Agency may grant additional time to submit the application upon request of the application. If a discharger fails to submit to the individual NPDES permittee is automatically terminated at the end of the day specified by the Agency for application submittal. The Agency may require an individual NPDES permit to as required by the Agency indicated in submittal. The Agency may require an individual NPDES permit additional time to submit the application under this paragraph, then the applicability of this permit to the individual NPDES permit to applicate at the end of the day specified by the Agency for application submittal. The Agency may require an individual NPDES permit based on:
 - a. information received which indicates the receiving water may be of particular biological significance pursuant to 35 III. Adm. Code 302.105(d)(6);
 - b. whether the receiving waters are impaired waters for suspended solids, turbidity or siltation as identified by the Agency's 303(d) listing;
 - c. size of construction site, proximity of site to the receiving stream, etc.

The Agency may also require monitoring of any storm water discharge from any site to determine whether an individual permit is required.

- 2. Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. In such cases, the permittee shall submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the Agency at the address indicated in Part II.D (Where to Submit) of this permit. The request may be granted by issuance of any individual permit or an alternative general permit if the reasons cited by the permittee are adequate to support the request.
- 3. When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an

alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to a discharger otherwise subject to this permit or the discharger is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee remains in effect, unless otherwise specified by the Agency.

- State/Environmental Laws. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.
- P. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all construction activities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.
- Q. Inspection and Entry. The permittee shall allow the IEPA, or an authorized representative upon presentation of credentials and other documents as may be required by law, to:
 - Enter upon the permittee's premises where a regulated construction activity is located or conducted, or where records must be kept under the conditions of this permit;
 - 2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;
 - Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.
- R. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- S. Bypasses and Upsets. The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.

Part VII. REOPENER CLAUSE

- A. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with Part I.C (Authorization) of this permit or the permit may be modified to include different limitations and/or requirements.
- B. Permit modification or revocation will be conducted according to provisions of 35 III. Adm. Code, Subtitle C, Chapter I and the provisions of 40 CFR 122.62, 122.63, 122.64 and 124.5 and any other applicable public participation procedures.
- C. The Agency will reopen and modify this permit under the following circumstances:
 - 1. the U.S. EPA amends its regulations concerning public participation;
 - a court of competent jurisdiction binding in the State of Illinois or the 7th Circuit Court of Appeals issues an order necessitating a modification of public participation for general permits; or
 - 3. to incorporate federally required modifications to the substantive requirements of this permit.

Part VIII. DEFINITIONS

"Agency" means the Illinois Environmental Protection Agency.

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Commencement of Construction or Demolition Activities" The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction or demolition activities.

"Construction Activities" Earth disturbing activities, such as clearing, grading and excavation of land. For purposes of this permit, construction activities also means construction site, construction site activities, or site. Construction activities also include any demolition activities at a site.

"CWA" means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.).

"Dedicated portable asphalt plant" A portable asphalt plant that is located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to. The term dedicated portable asphalt plant does not include facilities that are subject to the asphalt emulsion effluent limitation guideline at 40 CFR 443.

"Dedicated portable concrete plant" A portable concrete plant that is located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

"Dedicated sand or gravel operation" An operation that produces sand and/or gravel for a single construction project.

"Director" means the Director of the Illinois Environmental Protection Agency or an authorized representative.

"Final Stabilization" means that all soil disturbing activities at the site have been completed, and either of the two following conditions are met:

- (i) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
- (ii) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

For individual lots in residential construction, final stabilization means that either:

- (i) The homebuilder has completed final stabilization as specified above, or
- (ii) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

"Large and Medium municipal separate storm sewer system" means all municipal separate storm sewers that are either:

- Located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or
- Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or
- (iii) Owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

"NOI" means notice of intent to be covered by this permit (see Part II of this permit.)

"Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharges. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

"Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff.

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Storm Water Associated with Industrial Activity" means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program. For the categories of industries identified in subparagraphs (i) through (x) of this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (xi), the term includes only storm water discharges from all areas listed in the previous sentence (except access roads) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally or municipally owned or operated that meet the description of the facilities listed in this paragraph (i)- (xi)) include those facilities designated under 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

- Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this paragraph);
- (ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28, 29, 311, 32, 33, 3441, 373;
- (iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations meeting the definition of a reclamation area under 40 CFR 434.11(I)) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator;
- (iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;
- Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;
- (vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but

limited to those classified as Standard Industrial Classification 5015 and 5093:

- (vii) Steam electric power generating facilities, including coal handling sites;
- (viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42, 44, and 45 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under subparagraphs (i)-(vii) or (ix)-(xi) of this subsection are associated with industrial activity;
- (ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;
- (x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than one acre of total land area which are not part of a larger common plan of development or sale unless otherwise designated by the Agency pursuant to Part I.B.1.
- (xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 31 (except 311), 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (i)-(x)).

"Waters" mean all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois, except that sewers and treatment works are not included except as specially mentioned; provided, that nothing herein contained shall authorize the use of natural or otherwise protected waters as sewers or treatment works except that in-stream aeration under Agency permit is allowable.

"Work day" for the purpose of this permit, a work day is any calendar day on which construction activities will take place.

ILR10TMLPMTFINAL_7/29//2013

The following modifications have been made to the final permit from the previously issued General NPDES Permit ILR10:

- 1. I.B.1: A requirement that existing permittees may have to update/revise their Storm Water Pollution Prevention Plan (SWPPP). See also Section II.A.2 below
- 2. II.A.2: Provides that permittees must upgrade/revise their SWPPP within 12 months of the effective date of this permit. Projects which will be terminated within the next 12 months are not required to update/revise their SWPPP.
- 3. II.C.7: The requirement for consultation with the Illinois Historic Preservation Agency and the Illinois Department of Natural Resources was moved from Section I.C.3 to Section II.C.7.
- 4. II.C.9: Revised Notices of Intent for substantial modifications.
- 5. II.D: Where to submit Notices of Intent.
- 6. II.E: NOI shall be copied to local active MS4 permit holders.
- 7. II.F.1.d: Date of completion and stabilization now included in Notice of Termination (NOT).
- 8. II.F.2: Provides for electronic submission of NOT.
- 9. III.A.3: Prohibition of various non-storm water discharges in accordance with 40 CFR 450.
- 10. III.A.4: Allowance for groundwater dewatering in accordance with 40 CFR 450.
- 11. IV.B.5: Copy of Approval Letter must be posted at site.
- 12. IV.D.1.e: Inclusion of information concerning off-site stockpiling of soils or other materials in the site description.
- 13. IV.D.2.a: Delineation of erosion and sediment controls now specified in accordance with 40 CFR 450.
- 14. IV.D.2.b: Requirements for initiation of stabilization activities in accordance with 40 CFR 450.
- 15. IV.D.2.c: Design requirements for sediment basins added to permit.
- 16. IV.D.2.f: Pollution prevention measures now included in permit in accordance with 40 CFR 450.
- 17. IV.D.2.g: Provisions for control of other wastes now included in permit,
- 18. IV.D.2.h: Requirement to explicitly consider post-construction storm water management in the SWPPP.
- 19. IV.D.3.b. Requirement to keep sediment basins in operating condition.

- 20. IV.D.4.a: Clarified inspection requirements after construction has temporarily ceased or under frozen conditions.
- 21. IV.D.4.e: Specified that corrective actions must be undertaken immediately following an incident of non-compliance in accordance with 40 CFR 450.
- 22. VI.S: Bypass and Upsets provisions were added to the Standard Permit Conditions.
- 23. VIII: Definition of construction activities was added to permit.
- 24. VIII: Definition of work day was added to the permit.
- 25. General: References to the Illinois Environmental Protection Agency's Urban Manual were changed to Illinois Urban Manual (2012).
- 26. General: The word "facilities" in previous permit was changed to "construction activities" in the draft permit.
- 27. General: Various edits.



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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217)782-2829 PAT QUINN, GOVERNOR LISA BONNETT, DIRECTOR

Illinois Environmental Protection Agency

Notice of Intent (NOI) General Permit To Discharge Storm Water

Associated with Construction Site Activities

OWNER INFORMATION						ILR10	
Company/Owner Name:							
Mailing Address:					Phone	<u>e</u> t	
City:		State:	Zip:		Fax		
Contact Person:				E-1	nail:		· <u> </u>
Contact Person: OwnerTypePrivateCit	yFederal _	_County _	Special D	istrict S	State MS4 Co	mmunity:	YesNo
CONTRACTOR INFORMAT							
Contractor Name:		•					
Maining Address:					I	hone:	; <u>,,</u>
City:		State:	Zip: _		Fax:		
CONSTRUCTION SITE INF	ORMATION						
Select OneNew Change	of Information	for ILR10					
Project Name:						County:	
Street Address:			······································	Citv:	······································	11 7in.	
Latitude:	Longitude					it zip	
(Deg) (Min) (S	ec)	(Deg)	(Min)	(Sec)	Section	Township	Range
Approximate Construction Start	Date	τ. _Ο ν	Approxima	te Construct	tion End Date	rownsmp	Range
Total size of construction site in	acres:		(Fee Sche	dule- Less	than 5 acres	= \$250 / 5 or mo	
(Submit SWPPP electronically t Location of SWPPP for viewing						City:	
SWPPP Contact Information: Contact Name:		,				Inspector Qual	
Phone:	Fax:			E-	mail·		
Project Inspector, if different Inspector's Name:	rom above:					Inspector Qual	
Рһоле:	Fax:			E-:		· <u>····</u>	
Information required by this form must b result in your application being denied. For Office Use Only: Log: Date Fee Received IL 532 2104 WPC 623 Rev. 7/13	I his form has been a	opproved by the	Forms Manag	ement Center.			rocessed and could
4302 N. Main St., Rockford, IL 61103 (81 595 S. State, Elgin, IL 60123 (847)608-3 2125 S. First St., Champaign, IL 61820 (2	131			5407 N.	University Sf., Arba	nes, IL 60016 (847)29 or 113, Peoria, IL 616 6 Marian II 62050 (14 (309)693-5462

121

2009 Mall St., Collinsville, IL 62234 (618)346-5120

2309 W. Main St., Sulte 116, Marion, IL 62959 (618)993-7200 100 W. Randolph, Sulte 10-300, Chicago, IL 60601 (312)814-6026

Illinois Environmental Protection Agency Notice of Intent (NOI) General Permit To Discharge Storm Water Associated with Construction Site Activities

TYPE OF CONSTRUCTION	ILR10
Select One:	SIC Code:
(Commercial, Industrial, Residential, Recons	uction, Transportation, Other)
Type a detailed description of the project:	
Agencies have been notified.	to satisfy applicable requirements for compliance with Illinois law. Indicate if these
The finsion of reservation Agency.	Yes No http://www.illinoishistory.gov/PS/rcdocument.htm
IL Department of Natural Resources Submit any correspondence, approvals or con	Yes No <u>http://dnr.illinois.gov/ecopublic/</u>
cubiliti any correspondence, approvais of con	ination determinations for this project.
Owner of storm water system:	Waters of the State orStorm Sewer
I certify under penalty of law that this document and all a that qualified personnel properly gather and evaluate the persons directly responsible for gathering the information aware that there are significant penalties for submitting fi	achments were prepared under my direction and supervision in accordance with a system designed to assure formation submitted. Based on my inquiry of the person or persons which manage this system, or those the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am se information, including the possibility of fine and imprisonment. In addition, I certify that the provisions o of a storm water pollution prevention plan and a monitoring plan, will be complied with.
Owner Signature:	Date:
Any person who knowingly makes a false, fictitious, or f subsequent offense after conviction is a Class 3 felony. (udulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or 5 ILCS 5/44(h))
Electronic or FAX copies of this form may be submitt submission of an original signature copy as soon as po	t to the email address listed address. FAX and/or electronic copies should be followed-up with the ible.
Mail completed form by certification mail to:	llinois Environmental Protection Agency Division of Water Pollution Control #15 Attn: Permit Section 1021 N. Grand Avenue East, Post Office Box 19276 Springfield, Illinois 62794-9276
For Office Use Only: Log: Perm	No.: Date:

IL 532 2104 WPC 623 Rev. 7/13

INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITIY NOTICE OF INTENT (NOI) FORM

Submit complete NOI and SWPPP electronically to the following email address: <u>epa.constilr10swppp@illinois.gov</u> Submit the NOI with original signature and fee by certified mail to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control - #15 Attn: Permit Section 1021 N. Grand Avenue East, Post Office Box 19276 Springfield, Illinois 62794-9276

An electronic submittal with digital signature may be filed at the following website address: <u>http://dataservices.epa.illinois.gov/SWConstructionPermit/bowLogin.aspx</u>

Reports must be typed or printed legibly and signed.

Any construction site that is not presently covered by the General NPDES Permit for Storm Water Discharges From Construction Site Activities is considered a new construction site.

If this is a change in your construction site information, contractor, etc., please fill in your permit number on the appropriate line. If the change of information affects the fee schedule please submit the appropriate additional fee with this change of information.

NOTE: CONSTRUCTION SITE LOCATION IS NOT NECESSARILY THE OWNER MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE CONSTRUCTION SITE IS LOCATED.

Use the formats given in the following examples for correct form completion.

	Example	Format
Section	12	1 or 2 numerical digits
Township	12N	1 or 2 numerical digits followed by "N" or "S"
Range	12W	1 or 2 numerical digits followed by "E" or "W"

For the Name of Closest Receiving Waters, DO NOT use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as "Unnamed Tributary to Sugar Creek to Sangamon River."

Submission of initial fee and an electronic submission of Storm Water Pollution Prevention Plan (SWPPP) for Initial Permit prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits.

Please make checks payable to Illinois EPA and send to the above address:

Construction sites with less than 5 acres of land disturbance – fee is \$250 Construction site with 5 or more acres of land disturbance – fee is \$750

The following Agencies must be contacted:

IL Historic Preservation Agency - http://www.illinoishistory.gov/PS/rcdocument.htm

IL Dept of Natural Resources - http://dnr.illinois.gov/ecopublic/

Submit any correspondence, approvals or consultation determinations for this project from the above Agencies.

SWPPP should be submitted electronically to: <u>epa.constilr10swppp@illinois.gov</u>. When submitting electronically, use construction site name and City as indicated on NOI form.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
NOTICE OF TERMINATION (NOT)
OF COVERAGE UNDER THE GENERAL PERMIT
FOR STORM WATER DISCHARGES
ASSOCIATED WITH CONSTRUCTION SITE ACTIVITIES

Please use the tab or arrow keys

OWNER INFORMATION

1

Owner Name:						
Owner Type: (select one)	🗌 City	Federal	🗌 Cοι	unty 🔲 Special District 🔲 State		
Mailing Address:						
City:	State:	Zip:				
Contact Person:				Phone:		
CONTRACTOR INFORMATION						
Contractor Name:				"······		
Mailing Address:				Phone:		
City:	State:	Zip:				
CONSTRUCTION SITE INFORMAT	ION					
Facility Name:						
Street Address:						
County:		NPDES St	orm Water	r General Permit Number.: ILR10		
Latitude:	Longitude		·	······································		
(Deg) (Min) (Sec)		(Deg)	(Min)	(Sec) Section Township Range		
Date project has been completed and stabilized:						
I certify under penalty of law that disturbed soils at the identified facility have been finally stabilized or that all storm water discharges associated with industrial activity from the identified facility that are authorized by an NPDES general permit have otherwise been eliminated. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with industrial activity by the general permit, and that discharging pollutants in storm water associated with industrial activity by the general permit, and that discharging pollutants in storm water associated with industrial activity to Waters of the State is unlawful under the Environmental Protection Act and the Clean Water Act where the discharge is not authorized by an NPDES permit.						
Owner Signature:				Date:		
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))						
Mail completed form to: Illinois Environmental Protection Agency For Office Use Only Division of Water Pollution Control						
Attn: Permit Se Post Office Bo Springfield, Illir	ection c 19276			Log: Permit No. ILR10 Date:		
(Do not submit additional documentation unless requested)						

Information required by this form must be provided to comply with 415 ILCS 5/39 (1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

GUIDELINES FOR COMPLETION OF NOTICE OF TERMINATION (NOT) FORM

Please adhere to the following guidelines:

Submit original, photocopy or facsimile copies. Facsimile and/or photo copies should be followed-up with submission of an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the lower right hand corner.

Submit completed forms to:

Illinois Environmental Protection Agency Division of Water Pollution Control Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 217/782-0610

Reports must be typed or printed legibly and signed.

NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.

Use the formats given in the following examples for correct form completion.

	Example	Format
SECTION	12	1 or 2 numerical digits
TOWNSHIP	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE	12W	1 or 2 numerical digits followed by "E" or "W" $$

Final stabilization has occurred when:

(a) all soil disturbing activities at the site have been completed

- (b) a uniform perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures,
- (c) or equivalent permanent stabilization measures have been employed.



Storm Water Pollution Prevention Plan

Wilson Road	Marked Rte.	FAU 178	
14-F3000-02-BT	Project No.	TE-00D1(956)	
Lake	Contract No.	63808	
	14-F3000-02-BT	14-F3000-02-BT Project No.	14-F3000-02-BT Project No. TE-00D1(956)

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

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

Jeff Sloot	
Print Name	
Landscape Architect	
Title	
Lake County Forest Preserves	
Agency	40

I. Site Description:

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

Roadway improvements associated with this project begin at a point on the centerline of Wilson Road approximately 5,500 feet northwest of Illinois Route 120 and extends in a northerly direction in Lake County for a total net and gross length of 120.00 feet (0.02 miles).

The multi-use path improvements begin at a point approximately 1,650 feet southwest of the centerline of Wilson Road and continue to a point approximately 970 feet southeast of the centerline.

42-20-30N, 88-08-22W

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

The work consists of connecting the existing Millennium Trail multi-use path across Wilson Road by constructing an underpass to cross Wilson Road.

The work to be performed under this contract shall include, but not be limited to bike path underpass structure, earth excavation, construction of a multi-use path, pavement reconstruction, pavement removal, curb and gutter removal and replacement, lighting, storm sewer, pavement markings, erosion control, landscaping and all incidental and collateral work.

C. Provide the estimated duration of this project:

8 months.

D. The total area of the construction site is estimated to be 11.25 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 11.25 acres.

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

Printed 3/3/2014

Page 1 of 8

BDE 2342 (Rev. 1/28/2011)

0.37

List all soils found within project boundaries. Include map unit name, slope information, and erosivity: F.

Provide an aerial extent of wetland acreage at the site: G.

Site 1 - Station 110+50 - Total 0.06 acres. Impacted by ditch grading - 0.002 acres.

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

The roadway embankment of Wilson Road varies in slope from 1V:3H to 1V:10H and some steep slopes can be potentially erosive.

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

Pre-Stage

Removal of paved shoulder and construction of temporary pavement along southbound Wilson Road. The construction of temporary pavement requires the temporary grading of ditches along the road. The proposed ditch sideslopes vary from 1V:3H to 1V:10H.

Stage 1

Construct northbound Rollins Road underpass. Construct Millennium Trail east of Wilson Road. The excavation of the tunnel will use sheet piling to maintain soil stability. Slopes not protected will vary in slope from 1V:3H to 1V:10H. The construction of Millenium Trail will include ditches with sidesiopes at 1V:3H.

Stage 2

Construct southbound Wilson Road underpass. Construct Millennium Trail west of Wilson Road. The excavation of the tunnel will use sheet piling to maintain soil stability. Slopes not protected will vary in slope from 1V:3H to 1V:10H. The construction of Millenium Trail will include ditches with sideslopes at 1V:3H.

Stage 3

Remove temporary pavement and construct ditches. Ditches will have sideslopes varying from 1V:3H to 1V:10H.

- See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, J. 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.
- Identify who owns the drainage system (municipality or agency) this project will drain into: K.

The ditches and storm sewer proposed on the site belong to the Lake County Forest Preserve District. The storm sewer carries the ditch flow from the underpass to a low-lying area north of the project.

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

The receiving water is Squaw Creek. The ultimate receiving water is the Fox River.

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

All slopes will be protected using Temporary Erosion Control Seeding and Erosion Control Blanket.

- The following sensitive environmental resources are associated with this project, and may have the potential to be N. impacted by the proposed development:
 - \boxtimes Floodplain
 - \boxtimes Wetland Riparian
 - Threatened and Endangered Species
 - Historic Preservation
 - 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
 - Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation
 - Applicable Federal, Tribal, State or Local Programs m
 - П Other
 - 303(d) Listed receiving waters (fill out this section if checked above): 1.
 - The name(s) of the listed water body, and identification of all pollutants causing impairment: a.
 - Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting b. from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:
 - Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body: C.
 - Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body: d.
 - TMDL (fill out this section if checked above) 2.
 - The name(s) of the listed water body: а.
 - Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that b. is consistent with the assumptions and requirements of the TMDL:
 - If a specific numeric waste load allocation has been established that would apply to the project's discharges, C. provide a description of the necessary steps to meet that allocation:
 - The following pollutants of concern will be associated with this construction project: О.
 - Soil Sediment \boxtimes
 - $\overline{\boxtimes}$ Concrete
 - Concrete Truck Waste \boxtimes
 - \boxtimes Concrete Curing Compounds
 - \bowtie Solid Waste Debris
 - \boxtimes Paints
 - \boxtimes Solvents
 - \boxtimes Fertilizers / Pesticides

Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) \boxtimes \boxtimes Antifreeze / Coolants

 \boxtimes Waste water from cleaning construction equipment

- Other (specify)

Н. Controls:

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

A. Erosion and Sediment Controls

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

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

The following stabilization practices will be used for this project:

☐ Vegetated Buffer Strips ☐ Soddir ☑ Protection of Trees ☐ Geote ☑ Temporary Erosion Control Seeding ☐ Other ☐ Temporary Turf (Seeding, Class 7) ☐ Other	extiles (specify) (specify)
	(specify)
Permanent Seeding Other	(specify)

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

Protection of trees will be utilized to limit the impact of construction equipment/procedures on trees to be preserved.

Temporary Erosion Control Seeding will be used to stabilized graded areas if no permanent measures are to be taken in 14 days.

Erosion Control Blanket will be used to protect seeded slopes from erosion until stabilization by seed establishment.

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

Permanent Seeding will be used to stabilize graded areas.

Erosion Control Blanket will be used to protect seeded slopes from erosion until stabilization by seed establishment.

Rock Outlet Protection

Concrete Revetment Mats

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

 \boxtimes

Π

 \square

Riprap

Gabions

Slope Mattress

Retaining Walls

Level Spreaders

Slope Walls

The following structural practices will be used for this project:

- Perimeter Erosion Barrier
- Temporary Ditch Check
- Storm Drain Inlet Protection
- Sediment Trap
- Temporary Pipe Slope Drain
- Temporary Sediment Basin
- Temporary Stream Crossing
- Stabilized Construction Exits

Page 4 of 8

Turf Reinforcement Mats	Other (specify)
Permanent Check Dams	Other (specify)
Permanent Sediment Basin	Other (specify)
Aggregate Ditch	Other (specify)
Paved Ditch	Other (specify)

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

Perimeter erosion barrier will be used to cause the deposition of sediment from sheet flows prior to leaving the construction site.

Temporary ditch checks will be used to mitigate sediment transport into receiving structures or channels.

Storm Drain Inlet Protection (Inlet Filters) will be used to mitigate sediment transport into receiving structures.

Stabilized construction exits will be used reduce or eliminate the tracking of sediment from the construction site.

Sediment basins will be provided in the area of soil stockpile to captur ethe large rsediment loads.

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

Rock Outlet Protection will be used to protect soils downstream of storm sewer outfalls from erosive velocities.

- 3. **Storm Water Management:** Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.
 - a. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

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

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

Description of storm water management controls:

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.

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

- Contractor Required Submittals: Prior to conducting any professional services at the site covered by this plan, the 5. Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.
 - The Contractor shall provide a construction schedule containing an adequate level of detail to show a. 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
 - The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification b. 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.

Maintenance: 111.

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 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.

Clean sediment basin and temporary ditch checks per IEPA inspector and NOI requirements.

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: BDE 2342 (Rev. 1/28/2011) Page 6 of 8 Printed 3/3/2014

epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

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

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

V. Failure to Comply:

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



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	Wilson Road	Marked Rte.	FAU 178
Section	14-F3000-02-BT	Project No.	TE-F3000-02-BT
County	Lake	Contract No.	63808

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

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

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

Contractor

Sub-Contractor

Print Name

Title

Name of Firm

Street Address

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

City/State/ZIP

Signature

Telephone



DEPARTMENT OF THE ARMY

CHICAGO DISTRICT, CORPS OF ENGINEERS 231 SOUTH LA SALLE STREET CHICAGO, ILLINOIS 60604-1437

REPLY TO ATTENTION OF:

April 4, 2014

Technical Services Division Regulatory Branch LRC-2012-894

SUBJECT: Request Authorization to Impact Wetlands for the Millennium – Wilson Road Underpass in the Village of Round Lake, Lake County, Illinois

Michael Haug Lake County Forest Preserve 1899 West Winchester Road Libertyville, IL 60048

Dear Mr. Haug:

The U.S. Army Corps of Engineers, Chicago District, has completed its review of your notification for authorization under the Regional Permit Program (RPP), submitted on your behalf by Ciorba Group. This office has verified that your proposed activity complies with the terms and conditions of Regional Permit 2 and the overall RPP under Category I of the Regional Permit Program. The activity may be performed without further authorization from this office provided the activity is conducted in compliance with the terms and conditions of the RPP.

This verification expires three (3) years from the date of this letter and covers only your activity as described in your notification and as shown on the plans entitled "State of Illinois, Division of Transportation, Division of Highways, Plans for Proposed Federal Aid Project, Wilson Road, county Highway, Millennium Trail Underpass V58, Section 12-F3000-00-BT, Project No. XXXXXXXXXXXX", prepared by Ciorba Group, Inc, dated December 7, 2012. Seawall & Pier Construction. Caution must be taken to prevent construction materials and activities from impacting waters of the United States beyond the scope of this authorization. If you anticipate changing the design or location of the activity, you should contact this office to determine the need for further authorization.

This verification does not obviate the need to obtain all other required Federal, state, or local approvals before starting work. Please note that Section 401 Water Quality Certification has been issued by IEPA for this RP. Enclosed are the IEPA Section 401 Water Quality Certification conditions. If you have any questions regarding Section 401 certification, please contact Mr. Dan Heacock at IEPA Division of Water Pollution Control, Permit Section #15, by telephone at (217) 782-3362.

Once you have completed the authorized activity, please sign and return the enclosed compliance certification. If you have any questions, please contact Melyssa R. Navis of my staff by telephone at 312-846-5533, or email at melyssa.r.navis@usace.army.mil.

Sincerely,

Digitally signed by CHERNICH.K CHERNICH.KATHLEEN.G. 12303 65616 ATHLEEN.G. DN: ceuts. oeu JS Government, ou=DoD, ou=PRI, ou=USA on=CHERNICH.KATHLEEN.G.12 1230365616 Date: 2014.05.09 16:05:05 03036516 Date: 2014.05.09 16:05:05 Kathleen G. Chernich Chief, East Section Regulatory Branch

Enclosures

Copy Furnished:

Ciorba Group (Dayne Morris)

PERMIT COMPLIANCE



CERTIFICATION

Permit Number:	LRC-2012-894
Permittee:	Lake County Forest Preserve

Date: April 4, 2014

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of said permit and if applicable, compensatory wetland mitigation was completed in accordance with the approved mitigation plan.¹

PERMITTEE

DATE

Upon completion of the activity authorized by this permit and any mitigation required by the permit, this certification must be signed and returned to the following address:

U.S. Army Corps of Engineers Chicago District, Regulatory Branch 231 South LaSalle Street, Suite 1500 Chicago, Illinois 60604-1437

Please note that your permitted activity is subject to compliance inspections by Corps of Engineers representatives. If you fail to comply with this permit, you may be subject to permit suspension, modification, or revocation.

¹ If compensatory mitigation was required as part of your authorization, you are certifying that the mitigation area has been graded and planted in accordance with the approved plan. You are acknowledging that the maintenance and monitoring period will begin after a site inspection by a Corps of Engineers representative or after thirty days of the Corps' receipt of this certification. You agree to comply with all permit terms and conditions, including additional reporting requirements, for the duration of the maintenance and monitoring period.



US Army Corps of Engineers[®] Chicago District

GENERAL CONDITIONS APPLICABLE TO THE 2012 REGIONAL PERMIT PROGRAM

The permittee shall comply with the terms and conditions of the Regional Permits and the following general conditions for all activities authorized under the RPP:

1. <u>State 401 Water Quality Certification</u> - Water quality certification under Section 401 of the Clean Water Act may be required from the Illinois Environmental Protection Agency (IEPA). The District may consider water quality, among other factors, in determining whether to exercise discretionary authority and require an Individual Permit. Please note that Section 401 Water Quality Certification is a requirement for projects carried out in accordance with Section 404 of the Clean Water Act. Projects carried out in accordance with Section 10 of the Rivers and Harbors Act of 1899 do not require Section 401 Water Quality Certification

On March 2, 2012, the IEPA granted Section 401 certification, with conditions, for all Regional Permits, except for activities in certain waterways noted under RPs 4 and 8. The following conditions of the certification are hereby made conditions of the RPP:

- 1. The applicant shall not cause:
 - a) a violation of applicable water quality standards of the Illinois Pollution Control Board Title 35, Subtitle C: Water Pollution Rules and Regulations;
 - b) water pollution defined and prohibited by the Illinois Environmental Protection Act;
 - c) interference with water use practices near public recreation areas or water supply intakes;
 - d) a violation of applicable provisions of the Illinois Environmental Protection Act.
- 2. The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 3. Except as allowed under condition 9, any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all State statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent soil erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining a NPDES Stormwater Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of (1) one or more acres, total land area. A NPDES Stormwater Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Illinois EPA's Division of Water Pollution Control, Permit Section.
- 5. The applicant shall implement erosion control measures consistent with the Illinois Urban Manual (IEPA/USDA, NRCS; 2011, http://aiswcd.org/IUM/index.html).
- 6. The applicant is advised that the following permits(s) must be obtained from the Illinois EPA: The applicant must obtain permits to construct sanitary sewers, water mains, and related facilities prior to construction.
- 7. Backfill used in the stream-crossing trench shall be predominantly sand or larger size material, with less than 20% passing a #230 U.S. sieve.
- 8. Any channel relocation shall be constructed under dry conditions and stabilized to prevent erosion prior to the diversion of flow.
- Backfill used within trenches passing through surface waters of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:
 - a) particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using #230 U.S. sieve; or
 - b) excavation and backfilling are done under dry conditions.
- 10. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- 11. Any applicant proposing activities in a mined area or previously mined area shall provide to the IEPA a written determination regarding the sediment and materials used which are considered "acid-producing material" as defined in 35 Il. Adm. Code,

Subtitle D. If considered "acid-producing material," the applicant shall obtain a permit to construct pursuant to 35 Il. Adm. Code 404.101.

- 12. Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/stream banks, or 3) placed in waters of the State.
- 13. Applicants that use site dewatering techniques in order to perform work in waterways for construction activities approved under Regional Permits 1 (Residential, Commercial and Institutional Developments), 2 (Recreation Projects), 3 (Transportation Projects), 7 (Temporary Construction Activities), 9 (Maintenance) or 12 (Bridge Scour Protection) shall maintain flow in the stream during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.
- 14. In addition to any action required of the Regional Permit 13 (Cleanup of Toxic and Hazardous Materials Projects) applicant with respect to the "Notification" General Condition 22, the applicant shall notify the Illinois EPA Bureau of Water, of the specific activity. This notification shall include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL) for all cleanup activities under BOL jurisdiction, or for which authorization or approval is sought from BOL for no further remediation. This Regional Permit is not valid for activities that do not require or will not receive authorization or approval from the BOL.

2. <u>Threatened and Endangered Species</u> - If the District determines that the activity may affect Federally listed species or critical habitat, the District will initiate section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with the Endangered Species Act of 1973, as amended (Act). Applicants shall provide additional information that would enable the District to conclude that the proposed action will have no effect on federally listed species.

The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Act, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at www.fws.gov/midwest/Endangered. Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Review all documentation pertaining to the species list, provide the rationale for your effects determination for each species, and send the information to this office for review.

If no species, their suitable habitats, or critical habitat are listed, then a "no effect" determination can be made, and section 7 consultation is not warranted. If species or critical habitat appear on the list or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have "no effect" or "may effect" the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

Projects in Will, DuPage, or Cook Counties that are located in the recharge zones for Hine's emerald dragonfly critical habitat units may be reviewed under the RPP, with careful consideration due to the potential impacts to the species. All projects reviewed that are located within 3.25 miles of a critical habitat unit will be reviewed under Category II of the RPP. Please visit the following website for the locations of the Hine's emerald dragonfly critical habitat units in Illinois. http://www.fws.gov/midwest/endangered/insects/hed/FRHinesFinalRevisedCH.html

3. <u>Historic Properties</u> - In cases where the District determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity may require an Individual Permit. A determination of whether the activity may be authorized under the RPP instead of an Individual Permit will not be made until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the District with the appropriate documentation to demonstrate compliance with those requirements.

Non-Federal permittees must include notification to the District if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the permit application must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing permit submittals, the District will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. Based on the information submitted and these efforts, the District shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

The District will take into account the effects on such properties in accordance with 33 CFR Part 325, Appendix C, and 36 CFR 800. If all issues pertaining to historic properties have been resolved through the consultation process to the satisfaction of the District, Illinois Historic Preservation Agency (IHPA) and Advisory Council on Historic Preservation, the District may, at its discretion, authorize the activity under the RPP instead of an Individual Permit.

Applicants are encouraged to obtain information on historic properties from the IHPA and the National Register of Historic Places at the earliest stages of project planning. For information, contact:

Illinois Historic Preservation Agency 1 Old State Capitol Plaza Springfield, IL 62701-1507 (217) 782-4836 www.illinoishistory.gov

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity, you must immediately notify this office of what you have found, and to the maximum extent practicable, stop activities that would adversely affect those remains and artifacts until the required coordination has been completed. We will initiate the Federal, Tribal and State coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. <u>Soil Erosion and Sediment Control</u> - Measures shall be taken to control soil erosion and sedimentation at the project site to ensure that sediment is not transported to waters of the U.S. during construction. Soil erosion and sediment control measures shall be implemented before initiating any clearing, grading, excavating or filling activities. All temporary and permanent soil erosion and sediment control measures shall be maintained throughout the construction period and until the site is stabilized. All exposed soil and other fills, and any work below the ordinary high water mark shall be permanently stabilized at the earliest practicable date.

Applicants are required to prepare a soil erosion and sediment control (SESC) plan including temporary BMPs. The plan shall be designed in accordance with the Illinois Urban Manual, 2011 (http://aiswcd.org/IUM/index.html). Practice standards and specifications for measures outlined in the soil erosion and sediment control plans will follow the latest edition of the "Illinois Urban Manual: A Technical Manual Designed for Urban Ecosystem Protection and Enhancement." Additional Soil Erosion and Sediment Control (SESC) measures not identified in the Illinois Urban Manual may also be utilized upon District approval.

At the District's discretion, an applicant may be required to submit the SESC plan to the local Soil and Water Conservation District (SWCD), or the Lake County Stormwater Management Commission (SMC) for review. When the District requires submission of an SESC plan, the following applies: An activity may not commence until the SESC plan for the project site has been approved; The SWCD/SMC will review the plan and provide a written evaluation of its adequacy; A SESC plan is considered acceptable when the SWCD/SMC has found that it meets technical standards. Once a determination has been made, the authorized work may commence unless the SWCD/SMC has requested that they be notified prior to commencement of the approved plans. The SWCD/SMC may attend pre-construction meetings with the permittee and conduct inspections during construction to determine compliance with the plans. Applicants are encouraged to begin coordinating with the appropriate SWCD/SMC office at the earliest stages of project planning. For information, contact:

Kane-DuPage SWCD 2315 Dean Street, Suite 100 St. Charles, IL 60174 (630) 584-7961 ext.3 www.kanedupageswcd.org

North Cook SWCD 899 Jay Street Elgin, IL 60120 (847) 468-0071 www.northcookswcd.org McHenry-Lake County SWCD 1648 South Eastwood Dr. Woodstock, IL 60098 (815) 338-0099 ext.3 www.mchenryswcd.org

Lake County SMC 500 W. Winchester Rd, Suite 201 Libertyville, IL 60048 (847) 377-7700 www.lakecountyil.gov/stormwater

5. <u>Total Maximum Daily Load</u> - For projects that include a discharge of pollutant(s) to waters for which there is an approved Total Maximum Daily Load (TMDL) allocation for any parameter, the applicant shall develop plans and BMPs that are consistent with the assumptions and requirements in the approved TMDL. The applicant must incorporate into their plans and BMPs any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. The applicant must carefully document the justifications for all BMPs and plans, and install, implement and maintain practices and BMPs that are consistent with all relevant TMDL allocations and with all relevant conditions in an implementation plan. Information regarding the TMDL program, including approved TMDL allocations, can be found at the following website: www.epa.state.il.us/water/tmdl/

6. <u>Floodplain</u> - Discharges of dredged or fill material into waters of the United States within the 100-year floodplain (as defined by the Federal Emergency Management Agency) resulting in permanent above-grade fills shall be avoided and minimized to the maximum extent practicable. When such an above-grade fill would occur, the applicant may need to obtain approval from the Illinois

Department of Natural Resources, Office of Water Resources, (IDNR-OWR) which regulates activities affecting the floodway and the local governing agency (e.g., Village or County) with jurisdiction over activities in the floodplain. Compensatory storage may be required for fill within the floodplain. Applicants are encouraged to obtain information from the IDNR-OWR and the local governing agency with jurisdiction at the earliest stages of project planning. For information on floodway construction, contact:

IDNR/OWR 2050 Stearns Road Bartlett, IL 60103 (847) 608-3100 http://dnr.state.il.us/owr/

For information on floodplain construction, please contact the local government and/or the Federal Emergency Management Agency. Pursuant to 33 CFR 320.4(j), the District will consider the likelihood of the applicant obtaining approval for above-ground permanent fills in floodplains in determining whether to issue authorization under the RPP.

7. <u>Navigation</u> - No activity may cause more than a minimal adverse effect on navigation. Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

8. Proper Maintenance - Any authorized structure or fill shall be properly maintained, including that necessary to ensure public safety.

9. <u>Aquatic Life Movements</u> - No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including species that normally migrate through the area, unless the activity's primary purpose is to impound water.

10. <u>Equipment</u> - Soil disturbance and compaction shall be minimized through the use of matting for heavy equipment, low ground pressure equipment, or other measures as approved by the District.

11. <u>Wild and Scenic Rivers</u> - No activity may occur in a component of the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status. Information on Wild and Scenic Rivers may be obtained from the appropriate land management agency in the area, such as the National Park Service and the U.S. Forest Service.

12. <u>Tribal Rights</u> - No activity or its operation may impair reserved tribal rights, such as reserved water rights, treaty fishing and hunting rights.

13. <u>Water Supply Intakes</u> - No discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structures or adjacent bank stabilization.

14. Shellfish Production - No discharge of dredged or fill material may occur in areas of concentrated shellfish production.

15. <u>Suitable Material</u> - No discharge of dredged or fill material may consist of unsuitable material and material discharged shall be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act). Unsuitable material includes trash, debris, car bodies, asphalt, and creosote treated wood.

16. Spawning Areas - Discharges in spawning areas during spawning seasons shall be avoided to the maximum extent practicable.

17. <u>Obstruction of High Flows</u> - Discharges shall not permanently restrict or impede the passage of normal or expected high flows. All crossings shall be culverted, bridged or otherwise designed to prevent the restriction of expected high water flows, and shall be designed so as not to impede low water flows or the movement of aquatic organisms.

18. <u>Impacts From Impoundments</u> - If the discharge creates an impoundment of water, adverse impacts on aquatic resources caused by the accelerated passage of water and/or the restriction of its flow shall be avoided to the maximum extent practicable.

19. <u>Waterfowl Breeding Areas</u> - Discharges into breeding areas for migratory waterfowl shall be avoided to the maximum extent practicable.

20. <u>Removal of Temporary Fills</u> - Any temporary fill material shall be removed in its entirety and the affected area returned to its preexisting condition.

21. <u>Mitigation</u> - All appropriate and practicable steps must first be taken to avoid and minimize impacts to aquatic resources. For unavoidable impacts, compensatory mitigation is required to replace the loss of wetland, stream, and/or other aquatic resource functions (33 CFR 332). The proposed compensatory mitigation shall utilize a watershed approach and fully consider the ecological needs of the watershed. Where an appropriate watershed plan is available, mitigation site selection should consider recommendations in the plan. The applicant shall describe in detail how the mitigation site was chosen and will be developed, based on the specific

resource need of the impacted watershed. Permit applicants are responsible for proposing an appropriate compensatory mitigation option to offset unavoidable impacts. However, the District is responsible for determining the appropriate form and amount of compensatory mitigation required when evaluating compensatory mitigation options, and determining the type of mitigation that would be environmentally preferable. In making this determination, the District will assess the likelihood for ecological success and sustainability, the location of the compensatories restoration, establishment, enhancement, and in certain circumstances, preservation. Compensatory mitigation will be accomplished by establishing a minimum ratio of 1.5 acres of mitigation for every 1.0 acre of impact to waters of the U.S. Furthermore, the District has the discretion to require additional mitigation to ensure that the impacts are no more than minimal. Further information is available at www.lrc.usace.army.mil/Missions/Regulatory/Illinois/Mitigation.aspx

22. <u>Notification</u> - The applicant shall provide written notification (i.e., a complete application) for a proposed activity to be authorized under the RPP prior to commencing a proposed activity. The District's receipt of the complete application is the date when the District receives all required notification information from the applicant (see below). If the District informs the applicant within 60 calendar days that the notification is incomplete (i.e., not a complete application), the applicant shall submit to the District, in writing, the requested information to be considered for review under the Regional Permit Program. A new 60 day review period will commence when the District receives the requested information. Applications that involve unauthorized activities that are completed or partially completed by the applicant are not subject to the 60-day review period.

For all activities, notification shall include:

- a. A cover letter providing a detailed narrative of the proposed activity describing all work to be performed, a clear project purpose and need statement, the Regional Permit(s) to be used for the activity, the area (in acres) of waters of the U.S. to be impacted (be sure to specify if the impact is permanent or temporary, and identify which area it affects), and a statement that the terms and conditions of the RPP will be followed.
- b. A completed joint application form for Illinois signed by the applicant or agent. The application form is available at www.lrc.usace.army.mil/Portals/36/docs/regulatory/forms/appform.pdf. If the applicant does not sign the joint application form, notification shall include a signed, written statement from the applicant designating the agent as their representative.
- c. A delineation of waters of the U.S., including wetlands, for the project area, and for areas adjacent to the project site (off-site wetlands shall be identified through the use of reference materials including review of local wetland inventories, soil surveys and the most recent available aerial photography), shall be prepared in accordance with the current U.S. Army Corps of Engineers methodology (www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg_supp.aspx) and generally conducted during the growing season.* Our wetland delineation standards are available at www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/Delineations.pdf. For sites supporting wetlands, the delineation shall include a Floristic Quality Assessment (Swink and Wilhelm. 1994, latest edition, Plants of the Chicago Region). The delineation shall also include information on the occurrence of any high-quality aquatic resources (see Appendix A), and a listing of waterfowl, reptile and amphibian species observed while at the project area. The District reserves the right to exercise judgment when reviewing submitted wetland delineations. Flexibility of the requirements may be determined by the District on a case-by-case basis only.
- d. A street map showing the location of the project area.
- e. Latitude and longitude for the project in decimal degrees format (i.e. 41.88377N, -87.63960W).
- f. Preliminary engineering drawings sized 11" by 17" (full-sized may be requested by the project manager and you may also submit plans in PDF format on a disc) showing all aspects of the proposed activity and the location of waters of the U.S. to be impacted and not impacted. The plans shall include grading contours, proposed and existing structures such as buildings footprints, roadways, road crossings, stormwater management facilities, utilities, construction access areas and details of water conveyance structures. The plans shall also depict buffer areas, outlots or open space designations, best management practices, deed restricted areas and restoration areas, if required under the specific RP.
- g. Submittal of soil erosion and sediment control (SESC) plans that identify all SESC measures to be utilized during construction of the project.
- h. The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Endangered Species Act of 1973, as amended, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at www.fws.gov/midwest/Endangered. Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Print all documentation pertaining to the species list, include the rationale for your effects determination for each species, and forward the information to this office for review.

^{*} If a wetland delineation is conducted outside of the growing season, the District will determine on a case-by-case basis whether sufficient evidence is available to make an accurate determination. If the District finds that the delineation lacks sufficient evidence, the application will not be considered complete until the information is provided. This may involve re-delineating the project site during the growing season.

In the event there are no species, their suitable habitats, or critical habitat, then a "no effect" determination can be made and section 7 consultation is not warranted. If species or critical habitat appear on the list, or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have "no effect" or "may effect" on the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

- i. A determination of the presence or absence of any State threatened or endangered species. Please contact the Illinois Department of Natural Resources (IDNR) to determine if any State threatened and endangered species could be in the project area. You can access the IDNR's Ecological Compliance Assessment Tool (EcoCAT) at the following website: http://dnrecocat.state.il.us/ecopublic/. Once you complete the EcoCAT and consultation process, forward all resulting information to this office for consideration. The report shall also include recommended methods as required by the IDNR for minimizing potential adverse effects of the project.
- j. A statement about the knowledge of the presence or absence of Historic Properties, which includes properties listed, or properties eligible to be listed in the National Register of Historic Places. A letter from the Illinois Historic Preservation Agency (IHPA) can be obtained indicating whether your project is in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. The permittee shall provide all pertinent correspondence with the IHPA documenting compliance. The IHPA has a checklist of documentation required for their review located here: www.illinoishistory.gov/PS/rcdocument.htm.
- k. Where an appropriate watershed plan is available, the applicant shall address in writing how the proposed activity is aligned with the relevant water quality, hydrologic, and aquatic resource protection recommendations in the watershed plan.
- 1. A discussion of measures taken to avoid and/or minimize impacts to aquatic resources on the project site.
- m. A compensatory mitigation plan for all impacts to waters of the U.S. (if compensatory mitigation is required under the specific RP).
- n. A written narrative addressing all items listed under the specific RP.

For Category II activities, the District will provide an Agency Request for Comments (ARC) which describes the proposed activity. The ARC will be sent to the following agencies: United States Fish & Wildlife Service (USFWS), United States Environmental Protection Agency (USEPA), Illinois Department of Natural Resources (IDNR), Illinois Department of Natural Resources/Office of Water Resources (IDNR/OWR), Illinois Environmental Protection Agency (IEPA), Illinois Historic Preservation Agency (IHPA), Illinois Nature Preserves Commission (INPC) and U.S. Coast Guard (Section 10 activities only). Additional entities may also be notified as needed. These agencies have ten (10) calendar days from the date of the ARC to contact the District and either provide comments or request an extension not to exceed fifteen (15) calendar days. The District will fully consider agency comments received within the specified time frame. If the District determines the activity complies with the terms and conditions of the RPP and impacts on aquatic resources are minimal, the District will notify the applicant in writing and include special conditions if deemed necessary. If the District determines that the impacts of the proposed activity are more than minimal, the District will notify the applicant that the project does not qualify for authorization under the RPP and instruct the applicant on the procedures to seek authorization under an Individual Permit.

23. <u>Compliance Certification</u> - Any permittee who has received authorization under the RPP from the District shall submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the District with the authorization letter and will include: a) a statement that the authorized work was done in accordance with the District's authorization, including any general or specific conditions; b) a statement that any required mitigation was completed in accordance with the permit conditions and; c) the signature of the permittee certifying the completion of the work and mitigation.

24. <u>Multiple use of Regional Permits</u> - In any case where a Regional Permit is combined with any other Regional Permit to cover a single and complete project (except where prohibited under specific Regional Permits), the applicant shall notify the District in accordance with General Condition 22. If multiple Regional Permits are used, the total impact may not exceed the maximum allowed by the Regional Permit with the greatest impact threshold.

25. <u>Other Restrictions</u> - Authorization under the RPP does not obviate the need to obtain other Federal, State or local permits, approvals, or authorizations required by law nor does it grant any property rights or exclusive privileges, authorize any injury to the property or rights of others or authorize interference with any existing or proposed Federal project.

Approved by:

//ORIGINAL SIGNED// Frederic A. Drummond, Jr. Colonel, U.S. Army District Commander February 24, 2012 Date



STORMWATER MANAGEMENT COMMISSION

May 2, 2014

Mr. Jeff Sloot Lake County Forest Preserve District 1899 W. Winchester Road Libertyville, IL 60048

Subject: Watershed Development Permit #C09-84-083A Wilson Road Underpass Lat./Long. 42.3416, -88.1393

PERMIT ISSUANCE

Dear Mr. Sloot:

Accompanying this letter is the required Watershed Development Permit. This approval is subject to the conditions on the back of the permit including the following:

Impacts to Waters of the United States are not permitted unless a permit from the U.S. Army Corps of Engineers is received prior to any such impact.

- Provide prior notification to Brian Cook (of the SMC) of the pre-construction meeting at least 5 calendar days in advance to enable SMC attendance. The refund for the \$240 pre-construction deposit can be requested, in writing, after the meeting. The \$720 deposit, minus any and all assessed fees, can be requested, in writing, after permanent site stabilization and approval of an as-built submittal.
- The following items will be requested at the preconstruction meeting:
 - Designated Erosion Control Inspector contact information
 - o NPDES permit number
 - Reduced copy of the permitted plan set that has been signed and sealed by a professional engineer
- The DECI shall provide weekly reports to the SMC Inspector. At a minimum, the reports shall include photographs and evaluation of critical areas, as directed by the SMC Inspector, including:
 - o Dewatering activities
 - o Areas of concentrated flow as it leaves the site (sediment free discharge)
 - o Ensuring that the discharge culvert under Wilson Road stays free flowing
- DECI inspections are required until final as-built approval.
- Providing as-built plans showing any deviations from the permitted plan set, final inverts for the bypass culverts at 97+00, final grades for the bypass channel near Station 97+00, information on the re-routed drain tiles, etc.

This approval is based on the plans entitled:

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500 W. Winchester Road 🔹 Libertyville, Illinois 60048 🔹 847/377-7700 🔹 FAX 847/984-5747
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STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, PLANS FOR HIGHWAY, FEDERAL AID PROJECT, FAU 178 (WILSON ROAD) (COUNTY HIGHWAY V58), MILLENNIUM TRAIL UNDERPASS, SECTION 14-F3000-02-BT, PROJECT NO. TE-00D1(956), LAKE COUNTY FOREST PRESERVE DISTRICT, LAKE COUNTY, C-91-242-14, prepared by Ciorba Group, received by SMC April 15, 2014, 165 sheets (electronic format).

This approval includes authorization for proposed minor impacts to *Isolated Waters of Lake County* (IWLC) under SMC's General Permit #2. The project will partially impact one non-high quality IWLC totaling ± 0.002 acre (97ft²). Since less than 0.1 acre of non-high quality IWLC will be impacted, no wetland mitigation is required under the WDO. This IWLC impact approval is based on the plan entitled: *Wetland Impact, Wilson Road Underpass,* Sheet No. 1, by Ciorba Group, Inc., dated 3-17-14.

We would like to be of assistance. Do not hesitate to contact Brian Cook at (847)377-7702 if you have questions or would like to set up the pre-construction meeting.

If you have any additional concerns that have not been addressed by the regulatory staff, you may contact Chief Engineer Kurt Woolford <u>kwoolford@lakecountvil.gov</u> or Executive Director Michael Warner <u>mwarner@lakecountvil.gov</u> at (847) 377-7700.

If you would like to provide feedback regarding the SMC permit/inspection process please go to: (password – *survey*)

www.lakecountyil.gov/Stormwater/Pages/permit-process-survey.aspx

www.lakecountyil.gov/Stormwater/Pages/inspection-process-survey.aspx

Sincerely,

LAKE COUNTY STORMWATER MANAGEMENT COMMISSION

Lobit g. Mandiner

Robert D. Gardiner, P.E., CFM Permit Engineer

Kurt Woolford, P.E., CFM Chief Engineer

C: Tony Wolff – Ciorba Group Steve Rauch – Hey & Assoc. Melyssa Navis – USACE (LRC-2012-00894) Steve Crivello – EO for Unincorporated Lake County Kurt Baumann – EO for Round Lake

500 W. Winchester Road 🔹 Libertyville, Illinois 60048 🔹 847/377-7700 🔹 FAX 847/984-5747

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WATERSHED DEVELOPMENT PERMIT NUMBER Permit #C09-84-083A HAS BEEN SECURED

Project: Wilson Road Underpass

Date Issued: May 2, 2014

Lat/Long: 42.3416, -88.1393

PIN No.: 0535200020

- **Conditions:** Install and maintain all SE/SC measures • Minimize environmental impacts
- Issued By: Robert D. Gardiner, PE, CFM Permit Engineer

Kurt A. Woolford, PE, CFM, LEED AP Chief Engineer

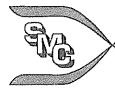
Notice to Contractors and Owners

Post this card at the site, visible from the street and so located as to permit the inspector to record the indicated inspections on the placard. Do not post in the interior of a building.

Inspectors and sheriff's deputies are instructed to stop all work where this permit card is not displayed.

Always mention the Watershed Development Permit number when referring to this project. If this card becomes mislaid or lost please contact Lake County Stormwater Management Commission for a replacement.

Lake County Stormwater Management Commission (847) 377-7705



SOIL AND MATERIAL CONSULTANTS, INC.

office: 1-847-870-0544 fax: 1-847-870-0661 www.soilandmaterialconsultants.com us@soilandmaterialconsultants.com

> August 29, 2012 File No. 20706

> > 146

Mr. Salvatore C. DiBernardo, P.E., S.E. Ciorba Group, Inc. 5507 N. Cumberland Avenue, Suite 402 Chicago, IL 60656

> Re: Geotechnical Investigation Wilson Road Crossing Millennium Trail Project – 2B Lake County, Illinois

Dear Mr. DiBernardo:

The following is our report of findings for the geotechnical investigation completed for the Wilson Road crossing of the Millennium Trail Project-2B located in Lake County, Illinois.

The investigation was requested to determine current subsurface soil and water conditions at select boring locations. The findings of the field investigation and the results of laboratory testing are intended to assist in the planning, design and construction of the proposed Wilson Road Underpass and associated site improvements.

SCOPE OF THE INVESTIGATION

The field investigation included obtaining 3 borings at the locations requested and as indicated on the enclosed location sketch. The boring locations were established using field taping methods and accuracy. Surface elevations were provided by Ciorba Group, Inc.

We auger drilled the 3 structure borings to depths of 30.0 feet below existing surface elevations. Soil samples were obtained using a split barrel sampler advanced utilizing an automatic SPT hammer. Soil profiles were determined in the field and soil samples returned to our laboratory for additional testing including determination of moisture content. Cohesive soils obtained by split barrel sampling were tested further to determine dry unit weight and unconfined compressive strength. Additionally, grain-size determination and Atterberg Limits testing were performed on selected samples. The results of all field determinations and laboratory testing are included in summary with this report.

RESULTS OF THE INVESTIGATION

Enclosed are boring logs indicating the soil conditions encountered at each location. Site surface conditions include vegetation, topsoil, pavement materials, and fill soil conditions. The topsoil is classified as dark brown to black silt/clay mixtures with traces of roots.

Fill soil conditions were encountered at boring 2 directly underlying the pavement materials. Composition of the fill includes the presence of clay/silt mixtures extending to a depth of 4.0

8 WEST COLLEGE DRIVE · ARLINGTON HEIGHTS, IL 60004

feet at this boring location. The limits of fill placement were not determined within the scope of this investigation.

Underlying natural soil conditions include the presence of non-cohesive soils. These include very loose to loose silt/clay, sand/gravel, silt/sand, and sand mixtures. The non-cohesive granular soils are in a damp to saturated condition.

Cohesive soils were also encountered underlying the non-cohesive soils. These are classified as stiff to very tough clay/silt mixtures with lesser portions of sand and gravel. These soils are high in moisture content with values in excess of 20.0 % determined. Cobbles and boulders may be present within the site soils at any elevation, although none were encountered while drilling.

High moisture content and lower-strength soil conditions are indicated at each of the borings. These conditions are likely present in other areas of the site but were not discovered within the scope of this investigation.

The following table summarizes depth ranges below existing grade, the magnitude of soil strength within these ranges and other information:

<u>Boring</u>	Surface Elevation <u>(feet)</u>	Depth Range Below Existing Surface <u>(feet)</u>	Soil Strength <u>(lbs./sg.ft.)</u>	Recorded Water Levels, W.D./A.D. <u>(feet)</u>
1	798.8	2.0 to 6.0 6.0 to 9.0 9.0 to 12.0 12.0 to 27.0	*500 1,500 2,000 1,500	8.0/7.5
2	798.9	1.0 to 15.0 15.0 to 27.0	1,500 2,000	6.5/6.5
3	800.1	1.5 to 17.0 17.0 to 27.0	3,000 1,500	0.0/27.0

* Not recommended for support of foundations.

It is expected that foundations can be supported on undisturbed natural soils located at any elevation within the depth ranges indicated in the above table, except as noted at boring 1. Above these depth ranges the soils are not considered able to support foundations, even at reduced design bearing values, due to long-term settlement considerations.

SUBSURFACE WATER

The boring logs and the above table indicate the depth at which subsurface water was encountered in the bore holes at the time of the drilling operations and during the period of these readings. It is expected that fluctuations from the water levels recorded will occur over a

Page 3

period of time due to variations in rainfall, temperature, subsurface soil conditions, soil permeability and other factors not evident at the time of the water level measurements.

The levels recorded indicate a possible perched water condition. Perched water is primarily surface precipitation falling on this site or adjacent properties that becomes trapped in pervious soil that is underlaid by relatively impervious soil. This water often flows laterally along a path of least resistance such as non-cohesive soil strata, farmers drain tile or other permeable medium. This water will also drain from the embankments of open excavations. The actual ground water condition is expected to be present in well defined granular soil layers located at deeper elevations. Based on our borings, we estimate a static water elevation of approximately 792.4'.

FOUNDATIONS

Based on the results of this investigation it is our opinion that continuous and isolated footing foundations may be considered for support of underpass loads. These foundations can be supported on undisturbed natural soils located below all topsoil, fill soils, low strength soils and other unsuitable conditions which may be encountered. Soil strength values and the depths at which they are expected to be encountered at these boring locations are indicated in the above table. A net allowable bearing value of 1,500 lbs./sq.ft. is available for design. This value can be used to size foundations for support of structure dead and live loads.

All underpass foundations should extend at least 48.0 inches below exposed surface elevations to provide adequate protection against uplift due to freezing of the supporting soils. We recommend providing adequate reinforcing steel in foundation walls and piers to minimize the effects of long-term differential settlement.

UNDERPASS SLABS

Underpass slabs planned for support on the existing soil conditions are expected to undergo some degree of long-term settlement as the soils consolidate under loading and as they shrink due to desiccation. Slabs may be considered for support on suitable natural soils or on properly placed and compacted fill soils. This is feasible when the soils supporting the slabs are prepared in accordance with the recommendations for Subgrade Soil Preparation.

DEWATERING

Excavations will require dewatering due to subsurface water seepage and surface precipitation. This water can likely be removed by standard sump and pump operations. Soils exposed at foundation, slab or undercut elevations should not be permitted to become saturated. Loss of bearing strength and stability may occur, requiring additional soil excavation.

Organic soils, fill soils, non-cohesive soils and others can be unstable when saturated. These soils tend to cave or run when submerged or disturbed. The stability of exposed embankments is minimal to non-existent as confining soil pressures are removed. Proper drainage within excavations is necessary at all times, particularly when excavations extend below anticipated water levels and below saturated soils.

The contractor should be made responsible for designing and constructing stable temporary excavations. Also, the contractor should shore, slope, bench or restrain the sides of the excavations as required to maintain stability of both the excavation sides and bottom. In no case, should the slope, slope heights, or excavation depth exceed those in the local, state, and federal safety regulations.

Permanent dewatering of the underpass is necessary. The dewatering system should include the provision for peripheral drain tile adjacent to the footings of foundation walls. We recommend damp-proofing or possibly water-proofing exterior foundation walls exposed to the interior of the underpass.

The presence of saturated sand and sand/silt soils within the top 8.5 feet may result in significant volumes of water being continually channeled to the drainage system. Water removal will likely be required on a frequent basis. This condition is often undesirable and can be minimized by backfilling the underpass with at least 2.0 feet of properly compacted clay fill outside of the drainage stone. The presence of a relatively impervious clay layer will provide a medium that significantly reduces the volume of water that has to be removed by the dewatering system.

STRUCURAL FILL

Structural fill can be placed on soils prepared to the satisfaction of the Soil Engineer. The fill should be placed in lifts not to exceed 8.0 inches when uncompacted. Each lift should exceed minimum compaction requirements prior to placement of the next lift. We recommend a minimum of 95% compaction based on the modified Proctor test, ASTM D-1557, be achieved within foundation areas. A minimum of 90% compaction should be achieved beneath exterior improvements such as pavements and sidewalks. Compaction requirements also apply to backfill placement around foundations and within trench excavations located below subgrade supported improvements.

The onsite non-organic soils are generally suitable for reuse as fill. Offsite sources may also be used provided they are approved in advance by the Soil Engineer. Aeration may be necessary to reduce soil moisture content prior to compaction. Soil borrowed from near the surface where seasonal fluctuations in soil moisture content occur may require particular attention. The moisture content of fill soils should be within approximately 3.0% of optimum moisture content as determined by the modified Proctor test for the soils to meet or exceed minimum compaction requirements.

SEISMIC DESIGN CONSIDERATIONS

The underpass is located in Seismic Performance Zone (SPZ) 1. Based on the soil conditions encountered and using the LRFD Seismic Soil Site Class Definition, Site Class D is applicable. The design spectral acceleration at 1.0 sec (S_{D1}) = 0.087g and the design spectral acceleration at 0.2 sec (S_{Ds}) = 0.163g.

DESIGN

The following values can be utilized for design:

Cohesive Soils

Unit Weight:	134 pcf
Cohesion	1,000 psf
Coefficient of Active Pressure	0.4
Coefficient of Passive Pressure:	2.3

Non-cohesive Soils

Unit Weight:	130 pcf
Phi	30 deg
Coefficient of Active Pressure	0.3
Coefficient of Passive Pressure:	3.0

No factor of safety has been applied to the above values. Passive pressures should be omitted within 4.0 feet of the surface due to seasonal weather conditions.

CONCLUSION

The information within this report is intended to provide initial information concerning subsurface soil and water conditions on the site. Variations in subsurface conditions are expected to be present between boring locations due to naturally changing and filled soil conditions.

Our understanding of the proposed improvements is based on limited information available to us at the writing of this report. The findings of the investigation and the recommendations presented are not considered applicable to significant changes in the scope of the improvements or applicable to alternate site uses. We recommend that proposed foundation, pavement and grading plans be reviewed by our office to determine if additional considerations are necessary to address anticipated subsurface conditions.

The soils exposed in soil undercut areas should be evaluated for suitability prior to placement of structural fill. Soils and aggregates placed as structural fill should be tested as the work progresses to verify that minimum compaction requirements have been met. We recommend that soil conditions encountered at foundation elevations be tested to verify the presence of design soil strength prior to concrete placement.

If you have any questions concerning the findings or recommendations presented in this report, please let me know.

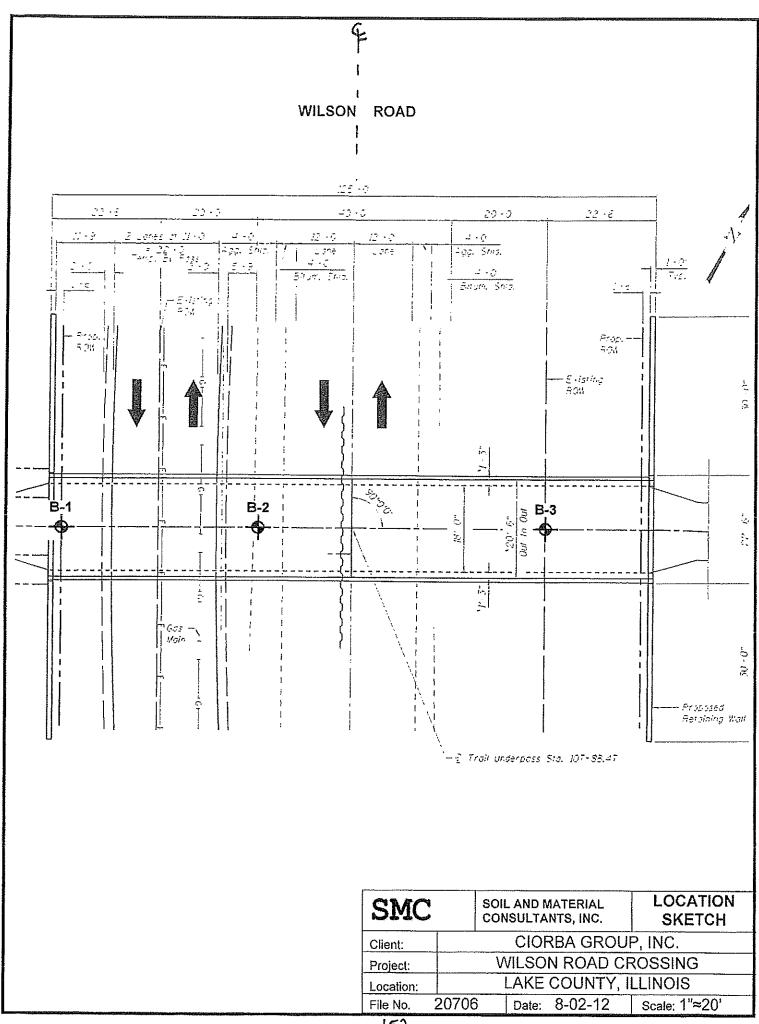
Very truly yours,

SOIL AND MATERIAL CONSULTANTS, INC.

Kato

Joseph A. Klawitter, P.E. Project Engineer

JAK:jk Enc.



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ng: <u>19.5</u>								-			
	Description y clay, some silt, trace yel, very damp, tough yel, very damp, tough yel, very damp, tough yel, very damp, tough fine-medium sand, some & gravel, saturated, med End of Boring End of Boring depth, ft. elev., ling: <u>8.0</u>	y clay, some silt, trace sand & yel, very damp, tough r clay, some silt, trace sand & rel, very damp, stiff fine-medium sand, some coarse & gravel, saturated, med. dense End of Boring	Clier Proje Cocat Cocat Equip Description Depth, ft. 20 y clay, some silt, trace sand & yel, very damp, tough Clay, some silt, trace sand & rel, very damp, stiff fine-medium sand, some coarse & gravel, saturated, med. dense 30 End of Boring End of Boring A0 S-samp depth, ft. elev., ft. 8-Stand	Client Project Location Equipmer Location Equipmer Clay, some silt, trace sand & 9 25 10	Client <u>Cior</u> Project <u>Wils</u> <u>Mill</u> Location <u>Lake</u> Equipment <u>M</u> <u>Clay</u> , some silt, trace sand & <u>Clay</u> , some silt, trace san	Client Ciorba G Client Ciorba G Project Wilson R Millenni Location Lake Cou Equipment COME 4 Courter Courter Cou	Client	Client Clorba Group, Inc. Project Wilson Road Crosst Millennium Trail P Location Lake County, IL Equipment CCME 45B [H.A. [Description Depth, ft. 20 S T R B N / clay, some silt, trace sand & // clay, some silt, trace sand // clay, s	Client Clorba Group, Inc. Project Wilson Road Crossting Millennium Trail Project Location Leke Courty, IL Equipment GCME 45B [H.A.] Other Description Depth, ft. 20 S T R B N Pen. y clay, some silt, trace sand & y clay, some silt, trace sand & y clay, some silt, trace sand & rel, very damp, tough Clause Some coarse of gravel, saturated, med. dense 30 12 SS 18" 2 4 1.0 Clause Some coarse of gravel, saturated, med. dense 30 12 SS 12" 9 15 End of Boring S - sample T -type: J(Jar), SS(spit-spoon), ST(shelb S - sample T	Client Cloba Group, Inc. Project Wilson Road Croasting Millennium Trail Project - 2B Location Lake County, IL Drill Equipment [3CME 45B [H.A.] Other Logg Description Depth, ft. 20 S T R B N Pen W y Clay, some silt, trace sand & 1 2 4 1.0 23.8 9 SS 18" 2 4 1.0 23.8 1 2 4 1.0 23.8 1 2 4 1.0 22.4 1 1 SS 18" 2 4 1.0 22.4 1 2 5 10 SS 18" 2 4 1.0 22.4 1 1 SS 18" 2 4 1.0 22.4 1 1 SS 18" 2 4 1.0 22.4 1 1 SS 18" 2 4 1.0 22.4 1 2 5 10 SS 18" 2 4 1.0 22.4 1 2 5 10 SS 18" 2 4 1.0 22.4 1 3 5 18" 2 4 1.0 22.4 1 3 5 18" 2 4 1.0 22.4 1 3 5 18" 2 4 1.0 22.4 1 4 0.75 21.1 1 5 18" 2 4 1.0 22.4 1 5 18" 2 4 0.75 21.1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Soft AND MATERIAL CURSULTANS, IC. Cilenti Cilenti Cilenti Cilenti Cilenti Sheet 2 Project Wilson Road Crossting Date 3 Millennaium Trail Project - 2B Location Lake County, IL Drilled By Equipment [3]CME 45B DH.A. [] Other Logged By Description Depth, fl. 20 S T R B N Pen. W UW V / clay,some silt,trace sand & 2 1.0 23.8 105.1 25 10 SS 18" 2 4 1.0 23.8 105.1 26 10 SS 18" 2 4 1.0 23.8 105.1 26 10 SS 18" 2 4 1.0 23.8 105.1 28 10 SS 18" 2 4 1.0 23.8 105.1 28 10 SS 18" 2 4 1.0 23.8 105.1 28 10 SS 18" 2 4 1.0 23.8 105.1 29 SS 18" 2 4 1.0 23.8 105.1 210 SS 18" 2 4 1.0 23.8 105.1 36 11 SS 18" 2 9

SOIL AND MATERIAL CONSULTANTS, INC.	File No BORING LOG
	Client <u>Ciorba Group</u> , Inc. Sheet $\frac{1}{2}$ of $\frac{2}{2}$
Comments	Project <u>Wilson Road Crossing</u> Date <u>8/2/12</u>
19' W. of Wilson Rd. CL	Millennium Trail Project - 2B Location <u>Lake County, IL</u> Drilled By <u>AC</u>
	Equipment CME 45B H.A. Other Logged By DA

Elev., ft	. 798.9'	Description	Depth, ft.	0	S	Т	R	В	N	Pen.	W	Uw	Qu
	Limestone	e,damp - 10.0"]								
	Brown-dar	k brown-black c	lay & si	lt,	-			6					
<u> </u>	trace san	nd & gravel,damp	,very	-	1			5					
	tough - H	111]1	SS	15"	5	10	3.25	16.6	112.5	2.9
					-								
794.9				-	-			2					Ì
	Brown sil	t,some fine san	d,trace					2	_				
		damp,loose		5	12	SS	18"	3	5		18.7		
793.9					-								
		ne sand,some sil nratéd,loose			-			2					
	uamp-sact	nateu,100se	¥]			3					
					3	SS	18"	2	5		19.9		
					-								1
790.4					-			2					
		y silt,some cla ,very damp,very			1			2					
		.,		10	4	SS	18"	2	4		21.0		
788.4					-								
	0		a and					1					
<u>}</u>	very damp	,some silt,trac	e sanu,		1			2					
	vory addir	,			5	SS	18"	2	4	1.0	20.8	113.6	1.8
<u> </u>					-								
					-			2					
					1			2					
				15	6	SS	_18''	3	_5	0.75	20.9	114.5	1.3
					-								
 					-			1					
				\rightarrow	1			2					
					7	SS	18"	3	5	1.0	22.0	110.4	1.7
					1								
780.4	·····				4			2					
		,some silt,trac	e sand,		-			2					
77.8.9	very damp	JSLIII		20	8	SS	18"	3	5	1.0	21.3	104.0	0.6
		. <u></u>		S-sam	1			'), SS(sp	lit-spoon), ST(shell		R - recovery	-
Water Le	vel —	depth, ft. ele			dard I	Penetra	ition Te	st (SPT)	, blows/	6" interval.	. V	V - water col	
- while drilling: 6.5 N-SPT, blows/ foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30".													

- while drilling: 6.5
- after drilling: 8.0
- hrs. after drilling: 6.5 _ 4

F-111b

155

Pen. - pocket penetrometer reading, tons/ sq. ft..

Qu - unconfined compressive strength, tons./ sq. ft..

Uw - dry unit weight of soil, lbs./ cu.ft.

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SIL	\checkmark	SOIL AND MATERIAL CONSULTANTS	S INC		File	No	2070	06	1 	BORI	NG	_OG_	2
				Clieni	t	Cio	rba (Group	, Inc	•		Sheet 2	_ of _2
Comments	5			Proje								Date _8	
						Mil Lak	lenn: e Cou	ium Tu unty,	ail I IL	Project	- 2B Drill	led By	AC
· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·										jed By	
Elev., ft.		Description	Depth, fl	. 20	S	T	R	В	N	Pen.	W	Uw	Qu
		clay,some silt,trace damp-damp,tough	sand,					2					
					9	SS	18"	2 3	5	1.5	22.1	112.7	1.4
						SS	18"	3	8	1.75	22.2	1111.1	1 /
						66	TO	4	0	1.75	22.2		1.4
						SS	18"	1 2 3	5	1.0	22.9	109.8	1.8
								1					
	****		<u></u>		12	SS	18"	2 3	5	1.0	21.9	111.2	1.1
• 		End of Boring											
-													
				35									
-											<u>.</u>		
-													: :

-

			S - sample T - type: J(Jar), SS(split-spoon), ST(shelby tube) R - recovery length, in.
Water Level —	lepth, ft.	elev., ft.	B - Standard Penetration Test (SPT), blows/ 6" interval. W - water content, %.
- while drilling:	6.5		N - SPT, blows/ foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30".
- after drilling:	8.0		Pen pocket penetrometer reading, tons/ sq. ft Uw - dry unit weight of soil, lbs./ cu.ft.
 4 hrs. after drilling: 	6.5	<u></u>	Qu - unconfined compressive strength, tons./ sq. ft

SIL	SOIL AND MATERIAL CONSULTANTS, INC.		File	No	2070	6	_ 6	BORI	NG L	OG	3
311	SUIL AND WATERIAL CONSOLTAINTS, INC.	Clien		Cior	ba G	roup,	Inc.			Sheet	of ²
Comment	S	Proje	nt I	Wils	on R	oad Ci	rossi	ng		Date 8	/2/12
	of Wilson Rd. CL		ion	Mill Lake	enni Cou	um Tra nty,	ail Pi IL	roject	- 2B Drille	Date <u>8</u> d By	AC
										ed By	
		Lquip	П¢П		///L_ 4				LUggi		
Elev., ft.	800.11 Description Depth, ft		S	T	R	В	N	Pen.	W	Uw	Qu
	Dark brown silt, some clay, trace sand & roots.damp (topsoil)										
	Brown silt,some clay,trace sand damp,loose	,	-1	SS	14"	5 4 5	9		12.1		
796.6											
	Brown fine sand,damp,loose	5	2	SS	18"	3 4 4	8		5.1		
793.6						3					
	Brown fine sand,some silt,damp, loose		3	SS	18"	4	8		17.4		
791.6	Brown-gray clay & silt,trace sand,damp,tough		4	SS	18"	2 3 4	7	1.5	20.0	129.6	1.8
	Brown-gray clay,some silt,trace sand,damp,tough		5	SS	18"	3 3 3	6	2,0	18.4	110.1	1.9
<u>787.1</u>	Gray clay,some silt,trace sand & gravel,damp,tough to very tough		6	SS	18''	2 3 3	6	1.75	22.5	109.7	1.8
			7	SS	18"	2 3 3	6	1.5	23.2	108.4	2.1
781.6	Gray clay, some silt, trace sand				-	23					
780.1	& gravel,damp,tough	20	8	SS	18"	3	6	1.0	22.3	112.2	1.8
	el — depth, ft. elev., ft. t le drilling: <u>27.0</u> Pen	√ - SPT, pocke	lard F blows et pen	Penetra s/ foot l etrome	ition Te to drive ater rea	st (SPT)	, blows/ split-spo s/ sq. ft	' Uw	r with 140 l	R - recovery N - water co b. hammer reight of soll,	ntent, %. falling 30".

SOIL AND MATERIAL CONSULTANTS, INC.	Fil	e No	BORING	; LOG	3
	Client _	Ciorba Group, Inc	2.	Sheet	2 of _2
Comments	Project	Wilson Road Cross		Date	8/2/12
	Location	Millennium Trail Lake County, IL	Project - 2	Ð	
	Equipme	ent ICME 45B IH.A.	Other L	ogged By	DA

Elev., ft.		Description	Depth,	ft. 20	S	Т	R	В	N	Pen.	W	Uw	QL
	Ont	, . .	•		H				_]		1	
		some silt,trace very damp-damp,t			H			$\left \begin{array}{c} 1 \end{array} \right $	-				
	a graver,	ery damp-damp,	Jugn					2	-				
					9	SS	18"	2	4	0.75	21.5	108.2	1.0
					Η				-				
·								1					
								2					
				25	10	<u>SS</u>	18"	2	4	0.75	23.6	109.3	1.0
					-								
								2					
			N. S.		4.,		1.01	3					
			2		11	SS	18"	3	6	1.0	24.1	108.4	1.2
												,	
							ļ	1					
<u>).1</u>				30	12	SS	18"	2	4	0.75	23.6	109.3	1.0
		End of Boring		<u></u>					-1		23.0	109.3	1. C
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er Leve		depth, ft. elev.,		S-samp						ST(shelby		- recovery le	
	e drilling:			B - Stand N - SPT. I								- water cont hammer fa	
- after	r drilling:	27.0	Pen	pocke	penel	tromete	er readi	ng, tons	/ sq. it			ght of soil, It	
- 24	hrs. after drill	ling: <u>11.0</u>		uncon									

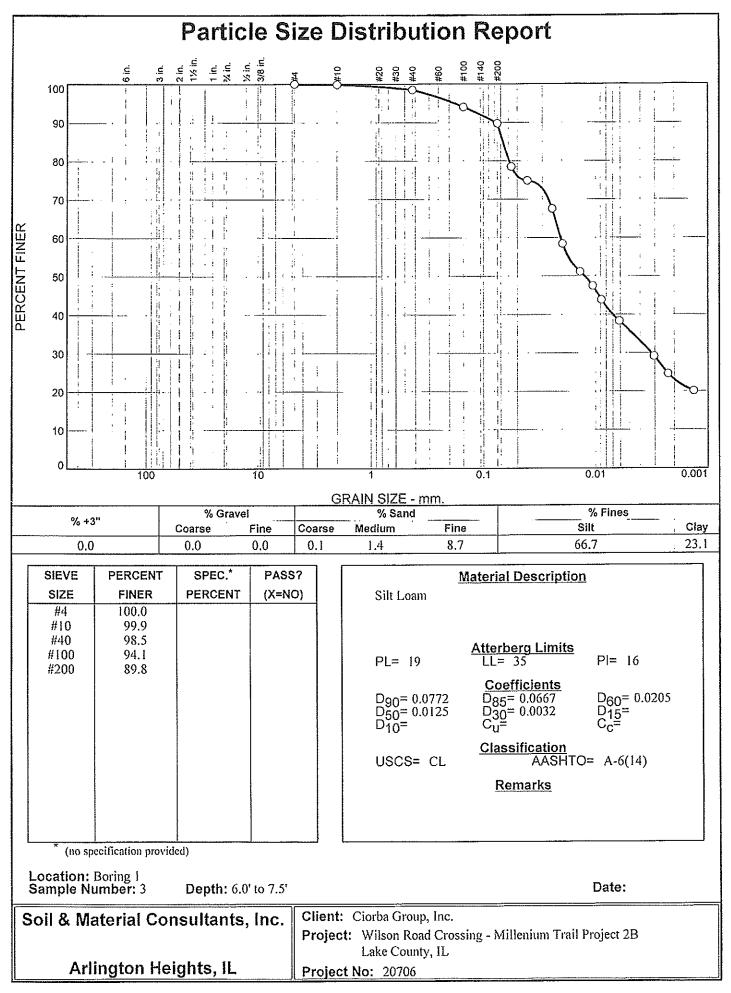


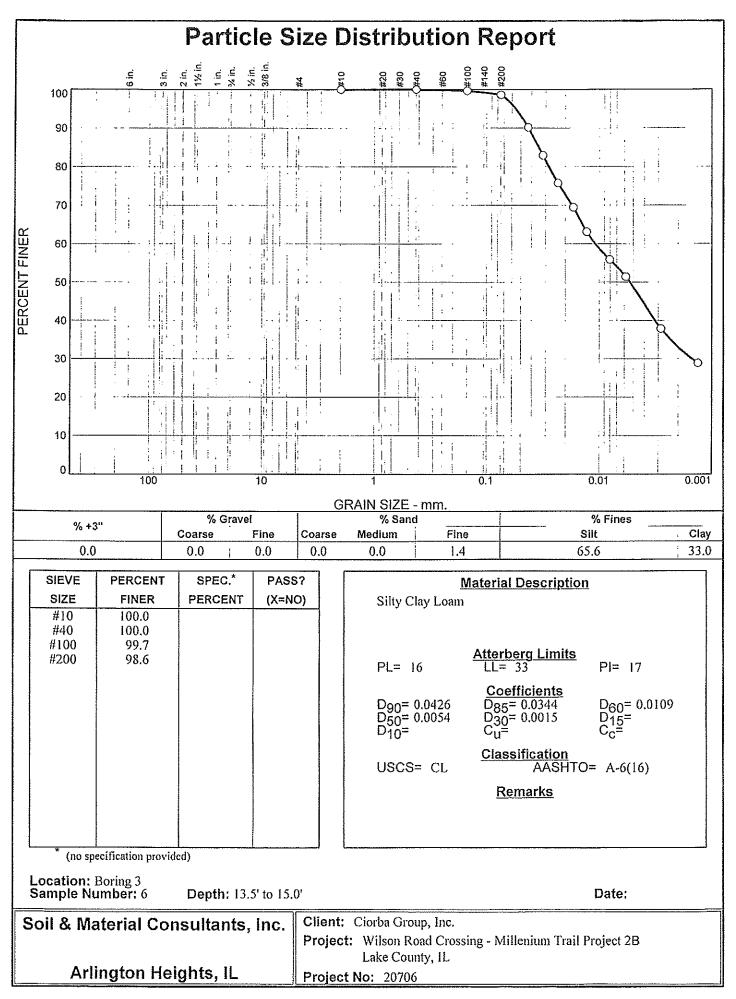
General Notes

SAMPLE CLASSIFICATION

Soil sample classification is based on the Unified Soil Classification System, the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM D-2488, the Standard Test Method for Classification of Soils for Engineering Purposes, ASTM D-2487(when applicable), and the modifiers noted below.

CONSISTENCY OF COHESIVE SOILS			SOILS	RELATIVE DENS	ITY OF GRANULAR SOILS
Term	Qu	-tons/sq. ft.	N (unreliable)	Term	N - blows/foot
Very Soft Soft Stiff Tough Very Tough Hard Very Hard	0 0 1 2 4 8	00 - 0.25 26 - 0.49 50 - 0.99 .00 - 1.99 .00 - 3.99 .00 - 7.99 .00 +	0 - 2 3 - 4 5 - 8 9 - 15 16 - 30 30 +	Very Loose Loose Medium Dense Dense Very Dense	0 - 4 5 - 9 10 - 29 30 - 49 50 +
IDENTIFIC	ATION A	ND TERMINO	JLOGY	DRILLING, SAMP	LING & SOIL PROPERTY SYMBOLS
r f Sand -c -r		or 3 in. 1 in. 3/8 in. #4 sieve #10 sieve #40 sieve #200 sieve 0.002 mm smaller th <u>Percent</u> 1 11	e Range ver 8 in. to 8 in. to 3 in. to 1 in. to 3/8 in. to #4 sieve to #10 sieve to #40 sieve to #200 sieve an 0.002 mm by Weight - 10 - 20 - 35 - 50	 BX - Rock Core, NX - Rock Core, S - Sample Nur T - Type of Sam J - Jar AS - Auger Sam SS - Split-spoon ST - Shelby Tube R - Recovery Le B - Blows/ 6 in. N - Blows/ foot with 140 lb. Pen Pocket Pen W - Water Cont Uw - Dry Unit We 	n Auger ng 1-3/16 in. diameter 1-5/8 in. diameter 2-1/8 in. diameter mber nple (2 in. O.D. with 1-3/8 in. I.D.) e (2 in. O.D. with 1-7/8 in. I.D.) e (2 in. O.D. with 1-7/8 in. I.D.) ength, in. Interval, Standard Penetration Test (SPT) to drive 2 in. O.D. split-spoon sampler hammer falling 30 in., (STP) etrometer reading, tons/ sq. ft. ent, % of dry weight eight of soil, lbs./ cu. ft.
	[Da Very	e Condition Dry amp Damp urated		Str - % Strain at WL - Water Leve WD - While Drilling AD - After Drilling DCI - Dry Cave-in WCI - Wet Cave-in UL - Liquid Limit PL - Plastic limit PI - Plasticity In	l lg l n , % , %





SOIL AND MATERIAL CONSULTANTS, INC.

File No. 20706

8 WEST COLLEGE DRIVE	OFFICE: (847) 870-0544
ARLINGTON HEIGHTS, IL 60004	FAX: (847) 870-0661

SOIL TEST DATA

1

CLIENT: Ciorba Group, Inc.

PROJECT: <u>Wilson Road Crossing</u> <u>Millennium Trail Project – 2B</u> <u>Lake County, IL</u>

BORING NO.	· · · · · · · · · · · · · · · · · · ·	B-1	B-3
SAMPLE NO.		3	6
DEPTH		6.0' - 7.5'	13.5' – 15.0'
ELEVATION		792.8' – 791.3'	786.6' – 785.1'
GRAIN SIZE CLASSIFICATION		Silt Loam	Silty Clay Loam
AASHTO CLASSIFICATION		A-6(14)	A-6(16)
GRADATION-PASSING 1" SIEVE	%	100	100
" 3/4" "	%	100	100
" 1/2" "	%	100	100
" 3/8" "	%	100	100
" No. 4 "	%	100	100
" No. 10 "	%	100	100
" No. 40 "	%	99	100
" No. 100 "	%	94	100
" No. 200 "	%	90	99
GRAVEL	%	0	0
SAND	%	10	1
SILT	%	67	66
CLAY	%	23	33
LIQUID LIMIT	%	35	33
PLASTICITY INDEX	%	16	17

REMARKS:

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

SPECIAL PROVISION FOR COOPERATION WITH UTILITIES

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

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

Replace Article 105.07 of the Standard Specifications with the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

SPECIAL PROVISION FOR INSURANCE

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

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

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

Lake County Forest Preserves District

Lake County

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

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.

 $CA = (BPI_P - BPI_L) \times (\%AC_V / 100) \times Q$

- Where: CA = Cost Adjustment, \$.
 - BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).
 - BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting, \$/ton (\$/metric ton).
 - $%AC_V =$ Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_V 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_V and undiluted emulsified asphalt will be considered to be 65% AC_V.
 - Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: Q, tons = $A \times D \times (G_{mb} \times 46.8) / 2000$. For HMA mixtures measured in square meters: Q, metric tons = $A \times D \times (G_{mb} \times 1) / 1000$. 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 x 8.33 lb/gal x SG / 2000
For bituminous materials measured in liters:	Q, metric tons = V x 1.0 kg/L x SG / 1000

Where:	А	 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 DEPARTMENTOPTION FOROF TRANSPORTATIONBITUMINOUS 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	r's Option:			
Is your com	pany opting to inclu	de this special provis	ion as part of the contract?	
	Yes 🗌	No 🗌		
Signature	:		Date:	<u></u>
80173				

COATED GALVANIZED STEEL CONDUIT (BDE)

Effective: January 1, 2013

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 μ 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 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.

Materials. 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)	
(b) Precast Concrete End Sections (Note 2)	
(c) Coarse Aggregate (Note 3)	
(d) Structural Steel (Note 4)	
(e) Anchor Bolts and Rods (Note 5)	
(f) Reinforcement Bars	1006.10(a)
(g) Nonshrink Grout	
(h) Chemical Adhesive Resin System	
(i) Mastic Joint Sealer for Pipe	
(i) Hand Hole Plugs	

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.

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

Basis of Payment. 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.

80311

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

Effective: April 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, Use T, according to ASTM C 920."

80334

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010 Revised: January 1, 2014

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

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

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

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

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

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

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

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

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

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

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

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

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

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000,00 for each deficiency identified.

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

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

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."

80335

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

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

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

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

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

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

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

<u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is

based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 19.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

- (a) The bidder documents that enough DBE participation has been obtained to meet the goal: or
- (b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.
- <u>DBE LOCATOR REFERENCES</u>. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217)785-4611, or by visiting the Department's website at <u>www.dot.il.gov</u>.

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

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

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

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

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

- (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
- (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
- (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.

- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for consideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

<u>CALCULATING DBE PARTICIPATION</u>. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is

generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (2) The DBE may also lease trucks from a non-DBE firm, including from an owneroperator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217)785-4611. Telefax number (217)785-1524.
- (b) <u>TERMINATION OR REPLACEMENT</u>. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in the Special Provision.
- (c) <u>CHANGES TO WORK</u>. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

- (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
- (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
- (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) <u>TERMINATION AND REPLACEMENT PROCEDURES</u>. The Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

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

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;

- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal.

(f) <u>PAYMENT RECORDS</u>. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the BDE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.

- (g) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

80029

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GRANULAR MATERIALS (BDE)

Effective: November 1, 2012

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

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

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

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

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

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

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

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

80303

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010 Revised: April 1, 2012

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

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

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

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

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

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

"Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 - 97.4%	91.0%
IL-9.5, IL-12.5	Ndesign ≥ 90	92.0 - 96.0%	90.0%
IL-9.5,IL-9.5L, IL-12.5	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0, IL-25.0	Ndesign ≥ 90	93.0 - 96.0%	90.0%
IL-19.0, IL-19.0L, IL-25.0	Ndesign < 90	93.0 - 97.4%	90.0%

SMA	Ndesign = 50 & 80	93.5 - 97.4%	91.0%
All Other	Ndesign = 30	93.0 - 97.4%	90.0%"

LRFD PIPE CULVERT BURIAL TABLES (BDE)

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

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

	"Item	Article/Section
(a)	Corrugated Steel Pipe	
(b)	Corrugated Steel Pipe Arch	
(c)	Bituminous Coated Corrugated Steel Pipe	
(d)	Bituminous Coated Corrugated Steel Pipe Arch	
(e)	Zinc and Aramid Fiber Composite Coated Corrugated Steel Pipe	1006.01
(f)	Aluminized Steel Type 2 Corrugated Pipe	
(g)	Aluminized Steel Type 2 Corrugated Pipe Arch	1006.01
(ĥ)	Precoated Galvanized Corrugated Steel Pipe	
(i)	Precoated Galvanized Corrugated Steel Pipe Arch	
(j)	Corrugated Aluminum Alloy Pipe	
(k)	Corrugated Aluminum Alloy Pipe Arch	
(I)	Extra Strength Clay Pipe	
(m)	Concrete Sewer, Storm Drain, and Culvert Pipe	1042
(n)	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	
(0)	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe	
(p)	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe	1042
(q)	Polyvinyl Chloride (PVC) Pipe	
(r)	Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior	
(s)	Corrugated Polypropylene (CPP) pipe with smooth Interior	1040.07
(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 Pipe	e1056
(w)	Mastic Joint Sealer for Pipe	
(X)	External Sealing Band	1057
(y)	Fine Aggregate (Note 1)	
(Z)	Coarse Aggregate (Note 2)	
(aa)	Packaged Rapid Hardening Mortar or Concrete	
	Nonshrink Grout	
	Reinforcement Bars and Welded Wire Fabric	
(dd)	Handling Hole Plugs	

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	Materiais
A	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:
	Corrugated Steel Pipe
	Corrugated Steel Pipe Arch
	Bituminous Coated Corrugated Steel Pipe
	Bituminous Coated Corrugated Steel Pipe Arch
	Zinc and Aramid Fiber Composite Coated Corrugated Steel Pipe
	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
l	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:

Type 3 Type 4 Type 3 Type 3 Type 4 Type 5 Type 3 Type 4 Type 5 Type 4 Type 5 Type 5 Type 6 Type 7 Type 7 Type 7 Type 7 Type 7 Type 6 Type 7 Type 7<					-	9 - T	ŧ	Tvne 7
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0.168Z 0.168Z 0.138	0.138 0.138 0.138	0.138	0.168	0.168			
	0.138 0.138 0.138	0.168	0.168	0.168			
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144 0.168Z 0.168Z 0.168	0.168 0.168 0.168	0.168 0.168			_		

11/2" x 1/4" corrugations shall be use for 6", 8", and 10" diameters.
 11/2" x 1/4" corrugation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 1'-6"
 1'-6" Minimum fill
 1'-6" Minimum fill
 Longitudinal seams assumed.

III. Fill Height:			1 000			Tvne 2			Tvoe 3			Type 4			Type 5			Type 6			Type 7	
I mand loss Genater than 1 m Genater than 2 m Genater than 4 m Genater than 4 m Genater than 3 m Genater than 4 m Genater than 1 m Genater than 1 m Genater than 1 m Genater than 1 m Genater than 4 m Genatr Genatr Genater		ц <u>т</u>	ill Height	1.1		cill Heigh	l.		-ill Heigh	#	Ē	ill Height:			ill Height:		Ē	II Height:		ίΣ	ll Height:	
BBX-13 TBX-26 TBX-26 TBX-26 TBX-26 TBX-26 TBX-26 TBX-26 TBX-26<	Nominal Diameter	10	m and le: m min. cc	ss	Gre. Rot e	ater than xceeding	11m 33m	Gre not e:	ater than vceeding	3 m 4.5 m	Great not e	er than 4. ceeding	e a e a	Gree not ex	tter than (ceeding 7	6 m 7.5 m	Great not ex	er than 7 cceeding	E E 6	Grea not exc	ter than (eeding 1)	о 1.5 m
	Ē	68 x 13	75 x 25	125 x 25	68 x 13			88	75 x 25	125 x 25	68 × 13	75 x 25 1		38 × 13	75 x 25 1		38 x 13 7	75 x 25		68 x 13	75 x 25 h	25 x 25
217 201 <th></th> <th>mm</th> <th>шш</th> <th>шШ</th> <th>E</th> <th></th> <th></th> <th>_</th> <th>E</th> <th>шш</th> <th>E</th> <th>mm</th> <th>E</th> <th>E</th> <th>ш</th> <th>a E</th> <th>Ē</th> <th>шш</th> <th>E</th> <th>E</th> <th>æ</th> <th>Ē</th>		mm	шш	шШ	E			_	E	шш	E	mm	E	E	ш	a E	Ē	шш	E	E	æ	Ē
2.77 2.01 <th< td=""><td>300*</td><td>2.77</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.01</td><td></td><td></td></th<>	300*	2.77			2.01			2.01			2.01			2.01			2.01			2.01		
277 201 <td>375</td> <td>2.77</td> <td></td> <td></td> <td>2.01</td> <td></td> <td></td> <td>2.01</td> <td></td> <td></td> <td>2.01</td> <td></td> <td></td> <td>2.01</td> <td></td> <td></td> <td>2.77</td> <td></td> <td></td> <td>2.77</td> <td></td> <td></td>	375	2.77			2.01			2.01			2.01			2.01			2.77			2.77		
2.17 2.01 <th< td=""><td>450</td><td>2.77</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.77</td><td></td><td></td><td>2.77</td><td></td><td></td><td>2.77</td><td></td><td></td></th<>	450	2.77			2.01			2.01			2.01			2.77			2.77			2.77		
2.17 2.01 <th< td=""><td>525</td><td>2.77</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.77</td><td></td><td></td><td>2.77</td><td></td><td></td><td>2.77</td><td></td><td></td></th<>	525	2.77			2.01			2.01			2.01			2.77			2.77			2.77		
217 201 217 <td>600</td> <td>2.77</td> <td></td> <td></td> <td>2.01</td> <td></td> <td></td> <td>2.01</td> <td></td> <td></td> <td>2.77</td> <td></td> <td></td> <td>2.77</td> <td></td> <td></td> <td>2.77</td> <td></td> <td></td> <td>2.77</td> <td></td> <td></td>	600	2.77			2.01			2.01			2.77			2.77			2.77			2.77		
2.77 2.01 <th< td=""><td>750</td><td>277</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.77</td><td></td><td></td><td>2.77</td><td></td><td></td><td>2.77</td><td></td><td></td><td>2.77</td><td></td><td></td><td>2.77</td><td></td><td></td></th<>	750	277			2.01			2.77			2.77			2.77			2.77			2.77		
2.77 2.77 2.01 <th< td=""><td>006</td><td>2.77E</td><td></td><td></td><td>2.01</td><td></td><td></td><td>2.77</td><td></td><td></td><td>2.77</td><td></td><td></td><td>2.77</td><td></td><td></td><td>2.77</td><td></td><td></td><td>3.51E</td><td></td><td></td></th<>	006	2.77E			2.01			2.77			2.77			2.77			2.77			3.51E		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1050	2.77	2.77	2.77	2.01	2.01	2.01	2.77	2.01	2.77	2.77	2.01	2.77	2.77	2.77	2.77	2.77E	2.77	2.77	3.51E	2.77	2.77
2.77 2.51 2.77 2.51 2.77 2.51 2.51 2.51 2.51 2.51 2.51 2.51 2.77 2.51 2.77 2.51 2.77 2.51 2.77 2.51 2.77 2.51 2.77 2.51 2.77 2.51 2.77 2.77 2.51 2.77 2.51 2.77 2.51 2.77 2.51 2.77 2.51 2.77 2.51 2.77 2.77 2.51 2.77 2.51 2.77 2.51 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.77 <th< td=""><td>1900</td><td>277</td><td>277</td><td>2.77</td><td>2.77</td><td>2.01</td><td>2.01</td><td>2.77</td><td>2.01</td><td>2.77</td><td>2.77</td><td>2.77</td><td>2.77</td><td>2.77</td><td>2.77</td><td>2.77</td><td>3.51E</td><td>2.77</td><td>2.77</td><td>3,51E</td><td>2.77</td><td>2.77</td></th<>	1900	277	277	2.77	2.77	2.01	2.01	2.77	2.01	2.77	2.77	2.77	2.77	2.77	2.77	2.77	3.51E	2.77	2.77	3,51E	2.77	2.77
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1350	9 77	2.77	2.77	2.77	2.01	2.77	2.77	2.01	2.77	2.77	2.77	2.77	2.77	2.77	2.77	3.51E	2.77	2.77	4.27E	3.51	3.51
3.51 2.77 3.51 2.01 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 4.27 3.51 4.27 3.51 4.27 3.51 4.27 3.51 4.27 3.51 4.27 3.51 4.27 3.51 4.27 3.51 4.27 3.51 4.27 3.51 4.27 3.51 4.27 3.51 4.27 3.51 4.27 <th< td=""><td>1500</td><td>277</td><td>2.77</td><td>2.77</td><td>2.77</td><td>2.01</td><td>2.77</td><td>2.77</td><td>2.01</td><td>2.77</td><td>2.77</td><td>2.77</td><td>2.77</td><td>3.51</td><td>2.77</td><td>2.77</td><td>3.51E</td><td>2.77</td><td>3.51</td><td>4.27E</td><td>3.51E</td><td>3.51E</td></th<>	1500	277	2.77	2.77	2.77	2.01	2.77	2.77	2.01	2.77	2.77	2.77	2.77	3.51	2.77	2.77	3.51E	2.77	3.51	4.27E	3.51E	3.51E
351 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 2.77 3.51 3.51 4.27E 3.51E 4.27E	1650	1 0	277	277	3.51	2.01	2.77	3.51	2.77	2.77	3.51	2.77	2.77	3.51	2.77	2.77	3.51E	3.51	3.51	4.27E	3.51E	4.27E
4.27 2.77 4.27 2.77 4.27 2.77 4.27 2.77 4.27 2.77 4.27 2.77 4.27 2.77 3.51 3.51 3.51 3.51 3.51 3.51 3.51 3.276 3.276 4.276	1800	3.51	2.77	2.77	3.51	2.01	2.77	3.51	2.77	2.77	3.51	2.77	2.77	3.51	2.77	3.51		3.51E	3.51E	4.27E	3.51E	4.27E
4.27 3.51 4.27	1950	4.27	2.77	2.77	4.27	2.01	2.77	4.27	2.77	2.77	4.27	2.77	2.77	4.27	3.51	3.51		3.51E	3.51E	4.27E	4,27E	4.27E
	2100	4.27	2.77	3.51	4.27	2.01	2.77	4.27	2.77	2.77	4.27	2.77	2.77	4.27	3.51	3.51		3.51E	4.27E	4.27E	4.27E	4.27E
	2250		3.51	3.51		2.01	2.77		2.77	2.77		2.77	3.51		3.51	3.51		4.27E	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	4.27		4.27E	4.27E		4.2/F	4.2/E
3.512 4.277 2.77 2.77 2.77 2.77 3.51 3.51 4.27 4.27 4.27 4.27E 4.27E <td>2550</td> <td></td> <td>3.51Z</td> <td>3.51Z</td> <td></td> <td>2.77</td> <td>2.77</td> <td></td> <td>2.77</td> <td>2.77</td> <td></td> <td>3.51</td> <td>3.51</td> <td></td> <td>3.51</td> <td>4,27</td> <td></td> <td>4.27E</td> <td>4.27E</td> <td></td> <td></td> <td></td>	2550		3.51Z	3.51Z		2.77	2.77		2.77	2.77		3.51	3.51		3.51	4,27		4.27E	4.27E			
0 3.51Z 4.27Z 2.77 2.77 2.77 2.77 3.51 4.27	2700		3.51Z	4.27Z		2.77	2.77		2.77	2.77		3.51	3.51		4.27	4.27		4,27E	4.27E			
0 3.512 4.272 2.77 2.77 2.77 2.77 3.51 3.51 4.27 4.27 0 4.272 4.272 3.51 3.51 3.51 3.51 4.27 4.27 0 4.272 4.272 3.51 3.51 3.51 3.51 4.27 4.27 0 4.272 3.51 3.51 3.51 3.51 4.27 4.27 0 4.272 3.51 3.51 3.51 3.51 4.27 4.27 0 4.272 4.27 4.27 4.27 4.27 4.27 0 4.272 4.27 4.27 4.27 4.27 4.27	2850		3.51Z	4.27Z		2.77	2.77		2.77	2.77		3.51	4.27		4.27	4.27		4.27E	4.27E		_	
1 4.272 4.272 3.51 3.51 3.51 3.51 4.27 4.27 4.27 1 4.272 4.272 3.51 3.51 3.51 3.51 4.27 4.27 1 4.272 4.272 3.51 3.51 3.51 3.51 4.27 4.27 1 4.272 4.272 3.51 3.51 3.51 4.27 4.27 1 4.272 4.27 4.27 4.27 4.27 4.27 1 4.272 4.27 4.27 4.27 4.27 4.27	3000		3.51Z			2.77	2.77		2.77	3.51		3.51	4.27	•	4.27	4.27					,	
4.272 4.272 3.51 3.51 3.51 3.51 3.51 4.27 <	3150		4.27Z			3.51	3.51		3.51	3.51		3.51	4.27		4.27	4.27					T	
0 4.272 4.272 3.51 3.51 3.51 3.51 3.51 4.27	3300		4.27Z	4.27Z		3.51	3.51		3.51	3.51		4.27	4.27		4.27	4.27						
0 4.27Z 4.2	3450		4.27Z	4,27Z		3.51	3.51		3.51	3.51		4.27	4.27		4.27	4.27						
	3600		4.27Z	4.27Z		4.27	4.27		4.27	4.27		4.27	4.27									

Notes: 38 mm x 6.5 mm corrugations shall be use for 150 mm, 200 mm, and 250 mm diameters. 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 Longitudinal seams assumed.

	FOR THE F	RESPECT	FOR THE RESPECTIVE DIAMETER	TABLE ER OF PIF	E IC: THICK	VESS OF HEIGHT	TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2" AND 3"x1" CORRUGATIONS	ED ALUMI TOP OF 1	INUM ALLOY	' PIPE)R 2 2/3"x	1/2" AND 3"x	1" CORRUC	BATIONS	
	Con T		TVDB 2	0	Tvpe 3	6	Type 4		Type 5		Type 6	9	Type 7	7
Nomimal	Fill Height:	aht:	Fill Height:	ight:	Fill Height:	ght:	Fill Height:	ht:	Fill Height:	ht:	Fill Height:	ght:	Fill Height:	jht:
Diameter in.	3' and less	ess	Greater than 3'	han 3' dipo 10'	Greater than 10'	1an 10' 15'	Greater than 15' not exceeding 20'	an 15' na 20'	Greater than 20' not exceeding 25'	un 20' ng 25'	Greater than 25 not exceeding 30'	an 25' ling 30'	Greater than 30' not exceeding 35'	an 30' ing 35'
		20Ver	1101 EXCERDING 10	3"41"	0 2/3"×1/2"	3"X1"	2 2/3"x1/2"	3"×1"	2 2/3"x1/2"	3"×1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"
ç	2/12 X1/2	N C	0.06	20	0,06	-	0.06		0.06		0.06		0.06	
л ñ	0.00		0.06		0.06		0.06		0.06		0.06		0.06	
2 9	0.06		0.06		0.06		0.06		0.06		0.06		G/0'0	
	0.00		0.06		0.06		0.06		0.06		0.075		0.075E	
2 2	0,0765		0.06		0.06		0.06		0.06		0.075		0.075E	
5 24			0.075		0.075		0.075		0.075		0.105E		0.105E	
8	0.105		1200		0.075		0.075		0.105		0.105E		0.105E	
36	0.105	0	0.0.0	000	0.0.0	0.06	0.105	0.06	0.105	0.06	0.105E	0.105	0.105E	0.105E
42	0.105	90.0	0.105	00.0	0,100	900	0.105	0.06	0.105	0.105	0.105E	0.105E	0.135E	0.135E
48	0.105E	cor.o	0.100		2010	30.0	0 105	0 105	0.105	0.105	0.105E	0.135E	0.135E	0.135E
54	0.105E	0.105	0.105	0.06	0.105	00.0	0.10		0.135	0 105	0.135E	0.135E	0.164E	0.135E
60	0.135E	0.105	0.135	0.06	0.135	0.05	0.133	201.0	0.154	0.135	0.164E	0.135E		0.135E
99	0.164E	0.105	0.164	0.06	0.164	000	0.104	105	0.164	0 135		0.135E		0.164E
72	0.164E	0.135	0.164	0.06	0.164	0.100	+01.0	2 1 2 2		0 135		0.135E		0.164E
78		0.135		0.075		0.103		201.0		0.135		0.164E		0.164E
84		0.135		0.105	-	0.105		0.135		0,135		0.164E		0.164E
6		0.135		0.105		0.105		0.135		0.164		0.164E		
ρç ζ		0 1357		0.135		0.135		0.135		0.164		0.164E		
		0 1957		0.135		0.135		0.135		0.164				
114		0.164Z		0.164		0.164		0.164		0.164				
120		0.164Z		0.164		0.164		0.164		0.164				

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

F	OR THE RE	SPECTIV	'e diamet	TABLE TABLE	E IC: THICH	KNESS OF L HEIGHT	CORRUG S OVER TI (Metric)	TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/ (Metric)	MINUM AL	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 (Metric)	'x1/2" AND	3"x1" COF	RUGATION	ស្វ
	L.O.T	+	1	Tune 2	TVD	Tvne 3		Type 4	Ţ	Type 5	Type 6	<u>, 6</u>	Type 7	57
	Fill Height:	e I sight:		Height:	Fill Height:	eight:	Fill H	Fill Height:		Fill Height:	Fill Height:	ight:	Fill Height:	ight:
Nominal Diameter	1 m and less	d less n cover	Greater not excer	Greater than 1 m	Greater than 3 m not exceeding 4.5	Greater than 3 m not exceeding 4.5 m	Greater t not exceu	Greater than 4.5 m not exceeding 6 m	Greater not excee	Greater than 6 m not exceeding 7.5 m	Greater than 7.5 m not exceeding 9 m		Greater than 9 m not exceeding 10.5 m	าลก 9 m ng 10.5 m
ś	68 × 13	75 x 25		75 x 25 mm	68 × 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm
			1 50		1 52		1.52		1.52		1.52		1.52	
300	2, 1 2, 1 - T		1 53		1.52		1.52		1.52		1.52		1.52	
3/2 7	707		1 53		1.52		1.52		1.52		1.52		1.91	
100 100 100 100	1915		1.52		1.52		1.52		1.52		1.91		1.91E	
	1.91E		1.52		1.52		1.52		1.52		1.91		1.91E	
750	2.67E		1.91		1.91		1.91		1.91		2.6/E		2.0/1	
8	2 67F		1.6.1		1.91		1.91		2.67		2.67E		2.67E	L
1050	2 67F	1.52	2.67	1.52	2.67	1.52	2.67	1.52	2.67	1.52	2.67E	2.67	2.6/H	2,6/E
1200	2 67F	2.67	2.67	1.52	2.67	1.52	2.67	1.52	2.67	2.67	2.67E	2.6/E	3.431	0.43E
1350	2 67F	2.67	2.67	1.52	2.67	1.52	2.67	2.67	2.67	2.67	2.67E	3.43E	3.43E	3,43E
1500	3.43E	2.67	3.43	1.52	3.43	1.52	3.43	2.67	3.43	2.67	3,43E	3.43E	4.1/E	а.43 Поделе Поделе
1650	4.17E	2.67	4.17	1.52	4,17	1.52	4.17	2.67	4.17	3.43	4.1/E	0,43F		
1800	4.17E	3.43	4.17	1.52	4.17	2.67	4.17	2.67	4.17	3.43		0.40F		4.1/E
1950		3.43		1.91		2.67		3.43		0.40 0.40		0,40 1 4 4 1		4 17F
2100		3.43		2.67		2.67		3.43		0,40		1 175		4 17F
2250		3,43		2.67		2.67		3.43		0 1 1 1 1 1		171		
2400		3.43		2.67		2.67		3.43	_	- + - !		4 7 F		
2550		3.43Z		3.43		3.43		3.43		4, - 		1 2 4		
2700		3.43Z		3.43		3.43		.43 1		4 /				
2850		4.17Z		4.17		4.17		4,17		4				
3000		4.17Z		4.17		4.17		4.1/		4.17				
Notes:									:	E - -	-			

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

Table IIA: THICKNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE	Type 1 Type 2 Type 3	Corrugated Steel	Arch Pipe Arch Cover 3' and less Greater than 3' not exceeding 10' Greater than 10' not exceeding 15' x 1" 3' and less	Steel Aluminum Steel Aluminum Steel Aluminum Steel	(in.) (in.) A			1 ⁻⁶ " 0.109 0.060 0.079 0.060 0.079 0.060	11-6" 0.109 0.075 0.075 0.075 0.075	1 ⁺ .6" 0.109 0.075 0.079 0.075 0.075 0.075 0.075	1 ⁺ 6" 0.109 0.105 0.079 0.105 0.109 0.105	11-6" 0.109 0.105 0.105 0.105 0.105 0.105 0.105	41 53 41 1'-6"	46 60 46 1'-6"	51 66 51 1'-6" 0.138 0.109 0.109 0.164 0.060 0.138 0.079 0.166 0.168 0.079 0.169 0.168 0.109 0.109 0.109	55 73 55 1'-6" 0.168 0.109 0.109 0.105 0.168 0.079 0.109 0.109 0.109 0.109	-	<u>63</u> 87 63 1'-6" 0.109 0.109 0.105 0.105 0.109 0.109 0.109	67 95 67 1-6" 0.109 0.109 0.109 0.105 0.109 0.109 0.109 0.109 0.109	71 103	75 112 75 112 75 11-6" 0.109 0.109 0.109 0.109 0.109	79 117 79 1'-6" 0.109 0.109 0.109 0.109 0.109	3 83 128 83 1'-6" 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138	7 87 137 87 1'-6" 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138	91 142 91 1 ⁻ 6"
IIA: THICKNESS FOR CORRUGATED STEEL PIPE ARC FOR THE RESPECTIVE EQUIVALENT ROUND SIZE C		Corrugated Min.	Pipe Arch Cover 5" x 1"		Open (in.) (in.) Aluminum 22/3" X 3"x1" 5" x 1"			_					53 41 1'-6" 0.109 0.079	60 46 1'-6" 0.109 0.109	66 51 1'-6" 0.138 0.109	73 55 1'-6" 0.168 0.109	81 59 1'-6" 0.168 0.109	87 63 1'-6" 0.109	95 67 1'-6" 0.109	103 71 1'-6" 0.109	112 75 1'-6" 0.109	117 79 1'-6" 0.109	128 83 1'-6" 0.138	137 87 1'-6" 0.138	142 91 1'-6" 0.168
Table I			Equivalent Pipe Arch Pipe Arch Round Size 22/3" x 1/2" 3" x 1"	Č	Span Hise Span H (in.) (in.) (i.) (i	15 17 13	18 21 15			35	42	49	57 38 53	64 43 60	71 47 66	77 52 73	83 57 81	87	95	103	112	102 117	128	114 137	142

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.

Corruga Steel & Alumir Steel & Alumir Steel & Alumir 75 x 25 1 75 x 25 1 75 x 25 1 75 x 25 1 7 1340 1 1670 1 11670 1 11670 1 11670 1 11850 1 22600 1 22840 1 28840 1 2	Table IIA: THICKNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE (Metric)	Type 1 Type 2 Type 3			Steel Aluminum Steel Aluminum Steel		5m 201 1.52 2.01 1.52	5m 2.77 1 1.52	.5 m	.5m 2.77 1.91 2.01 1.91 2.01	2.77 1.91 2.01 1.91 2.77	0.5 m 2.77 2.67 2.01 2.67 2.67 2.67 2.67 2.67	2.77 2.67 2.67 2.67 2.77 2.67 2.67	0.5 m 2.77 2.01 2.77 3.43 1.52 2.77 2.01 2.77 3.43 1.52 2.77 3.43 1.52 2.77 2.01 2.77 3.43	0.5 m	0.5 m 3.51 2.77 2.77 4.17 1.52 3.51 2.01 2.77 4.17 1.52 3.51 2.01 2.77 4.17 1.52 3.51 2.77 2.77 4.17	0.5 m 4.27 2.77 2.77 2.67 4.27 2.01 2.77 2.01 2.77 2.77 2.77	0.5 m 4.27 2.77 2.77 2.77 2.67 4.27 2.01 2.77 2.67 4.27 2.77 2.77	0.5 m 2.77 2.77 2.77 2.67 2.01 2.77 2.77 2.77 2.77	0.5 m 2.77 2.77 2.77 2.77 2.77 2.77 2.77 2.	0	0.5 m 2.77 2.77 4.17 2.77 2.77 2.77 2.77 2.77	0.5 m 2.77 2.77 2.77 2.77 2.77 4.17 2.77	0.5 m 3.51 3.51 3.51 3.51 3.51 3.51 3.51	0.5 m 3.51 3.51 3.51 3.51 3.51 3.51 3.51	0.5 m 4.27
Corruga & Alumire Pipe Ari Pipe Ari Pipe Ari 1340 1 1520 1 1520 1 1670 1 1670 1 1670 1 1670 1 2840 1	GATED STEEL PIPE ARCHES IVALENT ROUND SIZE OF PI (Metric)	Type 1	Fill Height:	1 m and less		125 x 25 mm		1.52	1.52	1.91	1.91	2.67	2.67	2.77	2.77	2.77										4.27 4.27
Corruga Steel & Alumiri Pipe Ar Pipe Ar 75 x 25 i 75 x 25 i 1340 1 1520 1 1520 1 1520 1 1520 1 1520 1 1520 1 2840 1 1850 1 2840 1 2840 1 1850 1 2840	: THICKNESS FOR СОННИ OR THE RESPECTIVE EQU					mm) Aluminum		. E	5 m	5 m		5 m	-	1050 0.5 m	1170 0.5 m	1300 0.5 m	1400 0.5 m	1500 0.5 m	1620 0	1720 0	1820 0	1920 0	2020 0	2120 0	2220	
Corrugated Steel & Aluminum Fipe Arch 68 x 13 mm 68 x 13 mm 68 x 13 mm 710 510 530 380 510 460 710 510 870 530 1240 840 1440 970 1800 1200 1950 13200 2100 1450	Table IIA I		Corrugated Steel & Aluminum	Pipe Arch 75 x 25 mm		(mm) (mm) (mm)		000	460				1	970 1340 1050	1100 1500 1170	1000 1520 1300	1320 1850 1400	1450 2050 1500	2200 1620	1720	1820	1920	2020	2120	2220	0350

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.

able 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	Type 1 Type 2 Type 3	Gover	ise RCCPHE&A HE Arch HE Arch HE Arch	HE-III A-III HE-IV	10" HE-III A-III	1'-0" HE-III A-III HE-III A-III HE-IV	1'-0" HE-III A-III HE-III A-III HE-IV	1 1'-0" HE-III A-III HE-III A-III HE-IV	11 -0" HE-III A-III	1'-0" HE-II A-II HE-III A-III HE-IV	10" HE-I A-II HE-III A-III HE-IV	1'-0" HE-1 A-II HE-III A-III 1460	1'-0" HE-I A-II HE-III A-III 1460 .	1'-0" HE-I A-II HE-III A-III 1460	1'-0" HE-I A-II HE-III A-III 1470	
CED CONCRETE EI				11 1, -0"						· •						"O"
		Reinforced Concrete Arch pipe (in.)	Span Rise	18	22 13 1/2		<u></u>	°.							88 54	
Table IIB: CLASSES FOR THE RESPEC		orced crete al pipe 1.)	Rise	14	77	r of	<u>, 5</u>	20	1 0	5 0	34	- a . c	84	48	2 2 2	
Table IIB FOR TH		Reinforced Concrete Elliptical pipe (in.)	Span	. 6	3 8	3 6	200		t 8			ŝ	3 8	76	83	•
		Equivalent Round Size (in.)		LT F	<u>0</u>	2 5		+	120	200	00	107	о 4 0 Z	t U	99)

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

		able IIB: CL/ FOR THE RI	ASSES OF R ESPECTIVE	EINFORCED	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)	PTICALL AND F PIPE AND F ic)) REINFORCE	ED CONCRET OVER THE T	e arch Pip Op of Pipe	Ψ	
						Type 1	61	Type 2	2	Type 3	e 3
Equivalent Round Size (mm)	Rein Con Elliptical	Reinforced Concrete Elliptical pipe (mm)	Reinforced Concrete Arch pipe (mm)	orced arete oe (mm)	Minimum Cover	Fill Height: 1 m and less	eight: d less	Fill Height: Greater than 1 m not exceeding 3 m	ight: n 1 m not ng 3 m	Fill Height: Greater than 3 m not exceeding 4.5 m	eight: in 3 m not g 4.5 m
	Span	Rise	Span	Rise	RCCP HE & A	뽀	Arch	빞	Arch	ΗE	Arch
376	5R4	356	457	279	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
200	L DD	356	559	343	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
	500	483	660	394	0.3 m	HE-III	A-III	HE-III	A-III	HE-I<	A-IV
070	207		724	457	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
000	70/	004	100	570	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
686	808 408	010	125	570	0.3 m	HE-III H	A-III	HE-III	A-III	HE-IV	A-IV
090	COA	727	1111	576 676	0.3 m	HE-1	A-II	HE-111	A-III	HE-IV	A-IV
900	0+1	Nag Nag	1200	795	0.3 m	HE-I	A-II	HE-III	A-III	HE-IV	A-IV
0001	0401	100	1486	914	0.3 m	HE-I	II-A	HE-III	A-III	70	70
1200	1221	5001	1651	1016	0.3 m	HE-I	A-II	HE-III	A-III	70	70
1330	12/1	1010	1854	1143	0.3 m	HE-I	A-II	HE-III	A-III	20	20
	1000	1946	2235	1372	0.3 m	HĒ-I	II-A	HE-III	A-III	70	20
10/0	2311	1473	2235	1372	0.3 m	HE-1	A-II	HE-III	A-III	02	70
Notes:							-				

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

		ີ້ຄໍ	СРР	Ā		∡	×	N	A	4	ς <	¥	Ā	NA	NA	
		than 1 20'		Z		_						Z	Z	z		
ŀ	lype 4	reater eding	Ш С	>	< :	× 	¥z	×	AN	>	< >	×	×	×	×	
	Z	Fill Height: Greater than 15' not exceeding 20'	CPVC	>	< :	×	×	×	×	>	< :	×	×	٧N	NA	
		Fill He	PVC	>	<	×	×	×	×	; >	< :	×	×	X	~	
		-	СРР	414	5	×	×	×	ΨN		EZ :	×	Ν	AN	NN N	
E PIPE		than 10' 15'	СРЕ	>	<	AN	ΝA	AN	NA		AN S	ΝA	ΝA	AN	NIN	
P OF TH	Type 3	sight: Greater that not exceeding 15'	Щ	>	<	×	AN	×	NA		NA	×	×	×	>	<
ED THE TOI		Ϊ	CPVC	>	~	×	×	×	` >	{ :	~	×	×	NA		- HA
TABLE IIIA: PLASTIC PIPE PERMITTED DIAMETER AND FILL HEIGHT OVER TH			PVC	;	×	×	×	×	< >		 ×	×	×	×	: >	×
ic Pipe I L Heigh			СРР		AN	×	×	×		YN I	×	×	×	AN		AN
PLAST ND FIL		r than 3 10'	CPE		×	×	×	``		ž	×	×	ΝA	NA		AN
e IIIA: Ieter /	Vbe 2	eight: Greater tha	붠		×	×	AN	>	< 1	H	×	×	×	; >	< :	×
TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE		Fill Height: Greater than 3' not exceeding 10'	CPVC		×	×	×	: >	< >	×	×	×	×	VIV		AN
IVEN P			PVC		×	×	×	< >	< >	×	×	×	×	; >	<	×
OR A G			СРР		AN	×	>	< >	< :	AN	×	×	: >		ž	×
		nd less,	CPE		×	×	: >	< >	< 3	NA	×	×	: >	< >	<	×
	Tvno 1	ight: 3' and	ЪЩ		×	×	VIV	5	×	AA	×	×	: >	< ;	~	×
		Fill Height: 3' and less,	CPVC		×	: ×	; >	< :	×	×	×	` >	< >		AN	NA
			PVC		×	<	$\langle \rangle$	< :	×	×	×	: >	< >	<	×	×
		Nominal	Diameter (in.)		ç	<u>5</u> ¢		<u>6</u>	8	21	24		2	QC C	42	48

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

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			han 4.5	6 m		СРР	NA		AN	-		AN		-	Ν		AN	٩N	٩N	
		Type 4	reater t	eeding		Ш Б Ц	×	<	×		Z	×	AN	×	: >	<	×	×	×	
		TVD	Eill Heinht: Greater than 4.5	m, not exceeding 6 m		CPVC	>	<	×	;	× 	×	~	> 	: >	<	×	AN	AN	
				E		PVC	>	<	×		×	×	×		< >	<	×	×	×	
						СРР	414	NA	×		×	×	NA		<u></u>	<	NA	NA	AN	
	E PIPE		0 0041	4.5 m		CPE	;	×	NA		ΑZ	NA				ΔN	٩Z	AN	ΔN	
	OF TH	Tune 2	n and	not exceeding 4.5 m		ш Д	:	×	×	{	AN	×			AN S	×	×	×	< >	<
	A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE (Metric)		1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Fill Height: Greater unant 2 m.		CPVC		×	: >	<	×	: >	< >	<	× :	×	×	VIV		
TTIMOD	TABLE IIIA: PLASTIC FILE FERMITTED DIAMETER AND FILL HEIGHT OVER TH (Metric)			Ĩ		PVC		×	: >	<	×	< >	< :	×	×	×	×	{ >	< >	<
	, HEIGH HEIGH			<u> </u>		СРР		NA 1	5>	<	>	< >	< }	AN	×	×	: >		NA	AN
	ND FILL H Metric)			than 1 n 3 m		CPE		>	< >	<	>	< >	<	AN	×	×			Z Z	NA
	LE IIIA: AETER A		Type 2	aight: Greater than not exceeding 3 m		ЫЧ		>	< :	×	414	<u> </u>	×	ΝA	×	>	< >	<	×	×
	TABI			Fill Height: Greater than 1 m,		CPVC		>	<	×	;	< :	×	×	×	>	< ;	×	AN	Υ
	alven PI					PVC	•	;	~	×		×	×	×	×	>	< :	×	×	×
	FOR A G					СРР			AN	×		×	×	NA	×	: :	×	×	ΝA	×
				and less,	. cover	СРЕ			×	>		×	×	AN	×	; ;	×	×	×	×
			Tvoe 1	: - -		Ц			×	>	<	ΥN	×	AN	×	<	×	×	×	×
				Fill Height: 1 m and less,	with 0.3 m min. cover	CPVC			×	>	<	×	×	×	>	<	×	×	Υ	AN
						PVC			×	>	<	×	×	: ×	<i>.</i> ,	<	×	×	×	×
				- Indianal I		Ulameter (mm)			250	}	300	375		2 U 2 U 4 U		000	750	006		1200

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

Fill Height: Greater than 20', not exceeding 25' Fill Height: Greater than 20', not exceeding 30' PVC CPVC CPVC X X X			Type 5	OR A GIVEN PIPE	TABLE IIIB: PLASTIC PIPE PERMITTED DIAMETER AND FILL HEIGHT OVER THE Type 6	STIC PIPE PEF FILL HEIGHT C Type 6	RANTTED	THE PIPE Type 7	
	Nominal Diameter (in.)	PVC	Greater than CPVC	20', not exceeding 25'	Fill Height: Gi PVC	eater than 25, CPVC	not exceeding 30'	Fill Height: Greater than 30', not exceeding 35 CPVC	30', not exceeding 35
	10	×	×		××	××		××	
	15 12	×××	×××		<××>	:×××		×××	
X X X X X X X X X X X X X X X X X X X	24 30	×××	×××		<××>	<××>		×××	
	36 42 48	×××	XNA		×××	< Z Z		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

			FOR A GIVEN PIPE	TABLE IIIB: P E DIAMETER AN	TABLE IIIB: PLASTIC PIPE PERMITTED DIAMETER AND FILL HEIGHT OVER TH	TABLE IIIB: PLASTIC PIPE PERMITTED GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE	HE PIPE	
					(metric)			
		Two 5	ſ		Type 6			lype /
Nominal		- out -	The second second second of the second of the second s	Fill Height: G	reater than 7.5 r	Fill Height: Greater than 7.5 m, not exceeding 9 m	Fill Height: Gr	Fill Height: Greater than 9 m, not exceeding 10.5 m
Diameter								
(mm)	PVC	CPVC		PVC	CPVC		CPVC	
				>	>		×	
250	×	×:		<	< ×		×	
300	×	×		 			×	
375	×	×:		< >	< ×		×	
450	×	×:		<	: ×	-	×	
525	×	×					×	
600	×	×:		< ×	< ×		×	
750	×	×>		< ×	×		×	
006	×	×			AN		NA	
1000	××	NA		< ×	AN		NA	
Notes: Notes: NA NA NA NA NA NA NA NA NA NA NA NA NA	Polyvinyl Chloride (PVC) pipe with a smooth i Corrugated Polyvinyl Chloride (CPVC) pipe w Polyethylene (PE) pipe with a smooth interior This material may be used for the given pipe Not Available"	a (PVC) pipe w rinyl Chloride () pipe with a si / be used for th	Polyvinyl Chloride (PVC) pipe with a smooth interior Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior Polyethylene (PE) pipe with a smooth interior This material may be used for the given pipe diameter and fill height Not Available"	th interior nd fill height				

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

Revise Article 550.02 of the Standard Specifications to read as follows:

 (a) Clay Sewer Pipe	1010.02
(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
A	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:

			FOR	KIND OF FOR A GIVEN PIPE	ID OF MA	TERIAL	STORN PERMITT S AND FI	STORM SEWERS ERMITTED AND S AND FILL HEIGHT	RS STRENG HTS OVEI	TH REQU	STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED /EN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE	E PIPE				
				Type 1	, -							Type 2	2			
Nominal Diameter			Fill Will	Height: 3 h 1' minim	Fill Height: 3' and less With 1' minimum cover						H III H III H	eight: Greater that not exceeding 10'	Fill Height: Greater than 3' not exceeding 10'	ē		
	RCCP	CSP	ESCP	PVC	CPVC	Ы	СРЕ	СРР	RCCP	CSP	ESCP	PVC	CPVC	Шd	СРЕ	СРР
10	AN	m	×	×	×	×	×	NA	AN	-	X*	×	×	×	×	AN
5	≥2	AN S	×	××	××	×	××	××	= =	· 1	¥¥	×	××	×	××	× >
15	2	AN	AN	×	×	AN	× 1	<	_		×	× :	× :	AN	<	<
18	2	AN	AN	×	×	×	×	×	_	2	×	×:	×:	×	×	×
21	= =	¥ X	₹ ×	× >	××	۹Z ×	¥×	₹×	_ =	2 0	××	××	××	AN X	₹×	¥ ×
24		AN	AN	Ň	NA	NA	Ň	Ň	=	ı ۳	×	NA	NA NA	NA	AN	A
i 00	: >	AN	ΨZ	×	×	×	×	×	=	ო	×	×	×	×	×	×
33	≡	NA	AN	AN	AN	AN	AN	AN	=	AN	×	NA	NA	NA	ΝA	NA
36		AN	NA	×	×	×	×	×	_	AN	×	×	×	×	٨N	×
42	=	NA	×	×	AN	×	×	AN	=	AN	×	×	AN	×	AN	NA
48	=	AN	×	×	NA	×	×	×	=	NA	×	×	AN	×	AN	NA
54	=	NA	NA	NA	NA	NA	ΝA	NA	=	NA	ΑN	AN	AN	AN	٩N	AN
60	=	NA	AN	NA	AN	NA	ΑN	×	=	AN	AN	AN	ΔN	AN	AN N	×
66	-	AN	AN	NA	NA	NA	AN	AN	=	AN	AN	NA	ΨZ	AN	AN	AN
72	=	NA	NA	NA	NA	NA	AN	AN	=	NA	AN	NA	AN	AN	AN	AN
78	=	AN S	AN 5	A Z	A S	¥:	¥2	¥2	= =	AN NA	AN 2	A Z	A Z	AN 2	A N	A Z Z
40 47 67	= =	AN AN		AN AN			AN		= =	AN	AN	AN	AN	AN	AN	AN
000			¢ d Z Z	A N	AN	Z Z	E Z	AZ	=	AN	AN	AN	AN	AN	AN	AZ
102	: ==	Ž	NA	AN	A	M	AN	AN	=	ΑN	AN	NA	AN	NA	AN	AN
108	=	Ą	NA	NA	NA	NA	NA	NA	Ξ	٨A	AN	AN	NA	NA	AN	NA
RCCP Reinfo	Dirced Con	Reinforced Concrete Culvert, Storm	120	Drain, and	d Sewer Pipe	ipe										
	Tele vewer	Concrete Sewer, Storm urain, and Concrete Sewer, Stored Character Dine		adi Jianin	ນ											
	Polyvinyi Unionue Pipe	ue ripe simi Obla	rido Dino													
ESCP Extra	gareu nuiy Strength C	Collugated Polyvilly Ciliolide Pipe Extra Strandh Clav Pine	nha cihe													
		n to the first off of the state of the														

Polyethylene Pipe with a Smooth Interior Corrugated Polyethylene Pipe with a Smooth Interior Corrugated Polypropylene pipe with a Smooth Interior HAD X X *

This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. May also use Standard Strength Clay Pipe

			FOR	AGN	STORM S KIND OF MATERIAL PERMI A GIVEN PIPE DIAMETERS AND	STORM { MATERIAL PERMI DIAMETERS AND		SEWERS (Metric) IITTED AND STRE D FILL HEIGHTS C	EWERS (Metric) TED AND STRENGTH REQUIRED FILL HEIGHTS OVER THE TOP OF THE PIPE	STH REQ R THE T	UIRED OP OF TH	E PIPE				
				Type 1	1							Typ	Type 2			
Nominal Diameter			Fill Hei With 300		Fill Height: 1 m' and less /th 300 mm minimum cover	ss wer					H III.	leight: Greater thai not exceeding 3 m	–	5 7 8		
<u></u>	RCCP	CSP	ESCP	PVC	CPVC	Ш	СРЕ	СРР	RCCP	CSP	ESCP	PVC	CPVC	ш	CPE	СРР
250	NA	6	×	×	×	×	×	NA	AN	F	¥	×	×	×	×	NA
300	<u></u>	, AZ	< ×	×	×	×	×	×	=	.	¥	×	×	×	×	×
375	2	AN	٩N	×	×	AN	×	×	11	-	¥	×	×	AA	×	×
450	2	AN	AN	×	×	×	×	×	=	2	×	×	×	×	×	×
525	: =	AN	¥	×	×	AN	A	AN	=	2	×	×	×	AN	AN	AN N
900		AN	ΔN	×	×	×	×	×	=	2	×	×	×	×	×	×
675		X	A	NA	AN	AN	NA	AN	-	e	×	AN	AN	AN	AN	AN NA
750	:≥	A	AN	×	×	×	×	×	=	ო	×	×	×	×	~	×
825	:=	AN	AN	AN	٩Z	AN	¥	AN	=	ΑN	×	AN	AN	A	AN	AN
000		NA	AN	×	×	×	×	×	=	AN	×	×	×	~	ΔN	×
1050	= =	AN	×	×	¥	×	×	AN	=	٩N	×	×	AN	×	AN .	₹ž
1200	: =	AN	×	×	٩Z	×	×	×	=	ΝA	×	×	AN	×	A	AN
1350		AN	AN	NA	NA	AN	NA	NA	_	NA	AN	ΨN	AN	AN	AN S	AN 3
1500	= =	AZ	AN	AN	AN	ΑN	AN	×	=	ΑN	ΑN	AN	NA	A Z	AN:	×
1650	: ==	AN	AN	AN	AN	٩N	AN	NA	I	AN	A	A	AN	A	AN	A
1800		AN	AA	AN	AN	AN	٩N	NA	=	AN	ΝA	ΨN	A S	AN S	¥:	A S
1950		AN	NA	AN	NA	Ν	ΑN	AN	=	AN	AN S	AN S	¥Z:	¥:	¥:	AN A
2100	=	AN	AN	NA	NA	NA	NA	AN	_	A	AN	AN	AN	¥:	AN A	AN
2250	=	AN	٨N	AN	NA	AN	AN	A		AN S	A S	¥ :	¥2	ž	E S	
2400		AN	AN	AN	٩N	٨A	A	AN	_	AN	۲Z	AN S	¥2	¥:	¥.	¥2
2550	=	AN	٩N	AN	NA	ΝA	AN	AN		AN	AN S	¥2	A Z	¥ :	¥ Z	AN
2700	=	NA	AN	AN	NA	AN	AN	AN		AN	NA	AA	M	AN	NA	NA
RCCP Reinf	Reinforced Concrete Culvert, Storm D	crete Culv	rert, Storm		ain, and Sewer Pipe	oipe										
	rete Sewei	r, Storm d	rain, and C	ulvert Pipe	ě											
	Polyvinyl Chloride Pipe	de Pipe	i :													
	igated Poly	vinyl Cnic	oride Pipe													

Extra Strength Clay Pipe Extra Strength Clay Pipe Polyethylene Pipe with a Smooth Interior Corrugated Polypropylene Pipe with a Smooth Interior Corrugated Polypropylene pipe with a Smooth Interior This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. May also use Standard Strength Clay Pipe

			FOR A GI	KIND O	F MATER	ST(AL PERN ERS AN	STORM SEWERS ERMITTED AND S AND FILL HEIGHT	WERS AND STF IEIGHTS	STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE	REQUIRE	D F THE PIPE	Ŀ			
				Type 3	3							Type 4			
Nominal Diameter			Fill Hei	eight: Greater tha not exceeding 15'	Fill Height: Greater than 10 not exceeding 15'	-0					Fill Height: not ex	eight: Greater than 15' not exceeding 20'	than 15' 20'		
Ē	RCCP	CSP	ESCP	PVC	CPVC	ЪЕ	CPE	СРР	RCCP	CSP	ESCP	PVC	CPVC	ш С	9 9 9
10	NA	2	×	×	×	×	×	AN	AN	3	×	×	×	×	AN
12	Ξ	0	×	×	×	×	AN	×	2	AN	AN	×	×	×	AN
<u>5</u>	=	ო	×	×	×	NA	AN	×	≥	NA	NA	×	×	NA	×
18		AN	×	×	×	×	AA	×	≥	NA	NA	×	×	×	NA
21	=	AA	٩N	×	×	NA	ΑN	AN	2	NA	NA	×	×	NA	AN
24	Ξ	AA	AN	×	×	×	AN	NA	≥	NA	NA	×	×	×	NA
27		AN	AN	NA	NA	NA	AN	NA	≥	NA	NA	NA	AN	NA	NA
30	Ξ	٩Z	AN	×	×	×	AN	×	≥	AN	AN	×	×	×	AN
8	Ξ	AN	٩N	AN	NA	ΑN	AN	ΑN	≥	NA	AA	NA	AA	NA	NA
36		A	AN	×	×	×	AN	AN	2	NA	NA	×	×	×	AN
42	Ξ	٩Z	٩N	×	٩N	×	AN	NA	≥	AN	¥	×	٩Z	×	AN
48	Ξ	AA	ΨN	×	AN	×	AN	NA	N	NA	NA	Х	NA	×	NA
54		NA	NA	NA	NA	AN	NA	NA	≥	AN	AN	AN	AN	ΝA	AN
09	≡	ΥN	AN	AN	AN	AN	AN	AN	≥	AN	AN	AN	AN	ΝA	AN
99	Ξ	NA	ΥN	AN	NA	AN	AN	NA	≥	AN	AN	NA	AN	AN	AN
72		A	AN	NA	NA	AN	AN	AN	2	ΝA	AN	AN	AN	ΥN	ΑN
78	Ξ	¥2	AN	AN	AN	ΝA	AN	AN	2	AN	٩N	Ă	٩Z	AN	AN
84	=	AN N	AN	AN	AN	AN	AN	AN	2	NA	AN	NA	NA	A	AN
06	E	AN	NA	NA	NA	NA	NA	AN	1680	ΑN	AN	AN	A	AN	AN
96	Ξ	AN	AN	ΨN	NA	AN	NA	AN	1690	AN	ΥN	A	A	AN	AN
102	2	¥Z	ΨN	AN	AN	AN	AN	AN	1700	AN	¥	¥	٩N	AN	AN
108	1360	AN	٩N	AA	NA	NA	NA	NA	1710	NA	NA	AA	AA	ΑN	AA
RCCP Reint	forced Con-	crete Culv	Storm	Drain, and	d Sewer Pipe	be									
	Concrete Sewer, Storm drain,	r, Storm di	rain, and Ct	and Culvert Pipe	Ð										
			-	•											

PVC CPPE N * N × CPPE N * N × CPPE N * N × CPPE

Polyvinyl Chloride Pipe Extra Strength Clay Pipe Extra Strength Clay Pipe Ecorrugated Polyvinyl Chloride Pipe Corrugated Polyvethylene Pipe with a Smooth Interior Corrugated Polyvethylene Pipe with a Smooth Interior Corrugated Polypropylene Pipe with a Smooth Interior This material may be used for the given Pipe diameter and fill height. This material is Not Acceptable for the given Pipe diameter and fill height. 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 D-load to produce a 0.01 in crack.

			FOR A GI	STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE	STORM S KIND OF MATERIAL PERMI /EN PIPE DIAMETERS AND	STORM SEWERS (metric) L PERMITTED AND STRE ERS AND FILL HEIGHTS C	SEWERS TTED AN FILL HE	S (metric) VD STRE IGHTS O	LEWERS (metric) TTED AND STRENGTH REQUIRED FILL HEIGHTS OVER THE TOP OF	QUIRED TOP OF '	THE PIPE				
				Type 3	8							Type 4			
Nominal Diameter			Fill He no	Fill Height: Greater than 3 m not exceeding 4.5 m	ter than 3 g 4.5 m	Ε				Щ	Fill Height: Greater than 4.5 m not exceeding 6 m	ight: Greater than not exceeding 6 m	han 4.5 m 6 m		4.00mm/million
Ë	RCCP	CSP	ESCP	PVC	CPVC	Ш	СРЕ	СРР	RCCP	CSP	ESCP	PVC	CPVC	Ы Б	СРР
250	AN	~	×	×	×	×	×	AN	AN	с	×	×	×	×	NA
300		2	×	×	×	×	NA	×	≥	Ν	AN	×	×	×	AN
375	=	ო	×	×	×	AN	ΝA	×	N	NA	NA	×	×	AN	×
450		AN	×	×	×	×	AN	×	≥	AN	AN	×	×	×	ΑN
525	=	Ν	٩N	×	×	AN	NA	AN	≥	AN	AN	×	×	NA	AN
600	=	NA	٩Z	×	×	×	AN	AN	≥	NA	NA	×	X	×	NA
675		AN	AN	NA	NA	NA	NA	NA	2	NA	NA	ΑN	NA	ΑN	AN
750	=	NA	٩Z	×	×	×	AN	×	≥	NA	AN	×	×	×	AN
825	Ξ	AN	AN	AN	AA	AN	AN	AA	≥	NA	NA	NA	NA	NA	NA
006		AN	NA	×	×	×	AN	AN	≥	NA	NA	×	×	×	AN
1050	=	NA	AN	×	ΑN	×	AN	AN	≥	AN	NA	×	NA	×	ΑN
1200	=	NA	AN	×	AN	×	AN	NA	≥	NA	NA	×	NA	×	AN
1350		AN	NA	AN	NA	NA	AN	NA	2	AN	AN	AN	AN	AN	AN
1500	=	٩N	٩N	٩Z	AN	AN	AN	AN	≥	Ā	Ν	AN	AN	ΝA	₹ Z
1650	:≡	A	M	AN	AN	ΑN	AN	NA	N	NA	NA	AN	AN	AN	AN
1800		AN	AN	NA	AN	AN	AN	ΨN	2	ΨZ	AN	NA	AN	AN	AN
1950	≡	NA	¥	AN	A	A	AN	AN	2	AN	AN	AN	AN N	AN	A Z
2100	≡	NA	AZ	AN	AN	AN	NA	AN	2	AN	AA	AN	AN	AN	NA
2250		NA	AN	NA	NA	AN	AN	٩N	80	AN	NA	AN	AN .	¥	A S
2400	=	NA	٩Z	Ν	AN	AN	AN	M	80	AN	ΑN	Ν	AN S	¥.	A Z
2550	2	AN	AN	¥	٩N	A	¥	ΝA	80	AN	NA	AN	٩Z	AN	AZ
2700	20	AN	AN	NA	NA	AN	NA	NA	80	AN	AA	AA	AN	AN	A
RCCP Reinfo	Reinforced Concrete Culvert,	rete Culve.		Storm Drain, and Sewer Pipe	Sewer Pipe	d's									
	Concrete Sewer, Storm drain.	Storm dra	-	and Culvert Pipe											

N*N×CCPECC Note PECCC Note PECCCC

Concrete Sewer, Storm drain, and Culvert Pipe Polyvinyl Chloride Pipe Extra Strength Clay Pipe Extra Strength Clay Pipe Corrugated Polyvinyl Chloride Pipe Extra Strength Clay Pipe Corrugated Polypropylene Pipe with a Smooth Interior Corrugated Polypropylene Pipe with a Smooth Interior This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. This 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.

	FOF	KINE KINE	D OF MATI	S ERIAL PEI AETERS A	STORM SEWERS ERMITTED AND S AND FILL HEIGHT	VERS ND STRE EIGHTS O	STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF	STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE	PE	
			Type 5			Type 6		Ty	Type 7	Ľ
Nominal Diameter	ter	Fill Height not ∈	Fill Height: Greater than 20' not exceeding 25'	than 20' 25'	Fill Heigh not	Fill Height: Greater than 25' not exceeding 30'	r than 25' 130'	Fill Height: 3	Fill Height: Greater than 30'	
ü.		RCCP	PVC	CPVC	RCCP	PVC	CPVC	RCCP		
			2			; ;			,	Т
		AN U	×	×	¥>	× >	×	¥Z >	×	
15		≥≥	< ×	< ×	> >	< ×	< ×	• >	< ×	
18		≥	×	×	>	×	×	>	×	1
21		≥	×	×	>	×	×	>	×	
24		2	×	×	>	×	×	V	×	
27		2	NA	NA	>	NA	NA	^	AN	
30		2	×	×	>	×	×	>	×	
33		2	NA	NA	>	NA	NA	>	NA	
36		N	×	×	>	×	×	>	×	
42		2	×	AN	>	×	AZ	>	NA	
48		2	×	NA	>	×	AN	>	AN	
54		N	٩N	٩N	>	AN	AN	>	NA	
60		2	¥	٩N	>	AN	AN	>	NA	
66		≥	NA	NA	>	NA	AN	>	AN	T
72		>	٩N	AN	>	AN	A	>	NA	
78		2020	AN	AN	2370	AN	¥	2730	AN	
84		2020	NA	NA	2380	AN	AN	2740	AN	
06		2030	NA	AN	2390	ΑN	A	2750	AN	
96		2040	AN	ΔŊ	2400	AN	AN	2750	NA	
102		2050	AN	AN	2410	AN	A	2760	AN	
108		2060	NA	NA	2410	AN	NA	2770	NA	
л.	einforc	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	e Culvert, 5	Storm Drai	n, and Sew	er Pipe				
	olyviny	Polyvinyl Chloride Pipe	ipe							
CPVC C	orninal	Corrupted Polyvinyl Chloride Pipe	// Chloride	Pine						

Corrugated Polyvinyl Chloride Pipe Extra Strength Clay Pipe This material may be used for the given pipe diameter and fill height. 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 D-load to produce a 0.01 in crack. CPVC ESCP NA Note

			STOF	STORM SEWERS (metric)	(metric)		and a second	
FO	KINE R A GIVEN I	D OF MAT	ERIAL PEI AETERS A	KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED /EN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF	ID STRENC	STH REQU	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	7
Nominal	Fill Heig	Fill Height: Greater than	er than	Fill Hei	Fill Height: Greater than	er than	Fill Height: Greater than	reater than
Diameter in.	not e	zu not exceeding 25	25'	not	zo not exceeding 30'	30'	ou not exceeding 35	ding 35'
	RCCP	PVC	CPVC	RCCP	PVC	CPVC	RCCP	CPVC
250	NA	×	×	NA	×	×	NA	×
300	2	×	×	>	×	×	>	×
375	≥	×	×	>	×	×	>	×
450	≥	×	×	>	×	×	>	×
525	2	×	×	>	×	×	>	×
600	2	×	×	>	×	×	>	×
675	2	NA	NA	>	NA	NA	>	AN
750	2	×	×	>	×	×	>	×
825	2	AN	AN	>	NA	AN	~	AN
006	2	×	×	>	×	×	>	×
1050	2	×	ΝA	>	×	AN	>	AN
1200	2	×	NA	>	×	AN	>	NA
1350	2	NA	NA	>	NA	NA	>	ΨN
1500	2	AN	NA	>	NA	ΝA	>	Ϋ́
1650	2	A	NA	>	NA	AN	>	AN
1800	>	AN	NA	>	AN	AN	>	ΨZ
1950	100	٩N	AN	110	AN	AN	130	ΑN
2100	100	NA	NA	110	NA	NA	130	AA
2250	100	NA	NA	110	AN	AN	130	¥
2400	100	ΝA	ΥN	120	AN	AN	130	ΑN
2550	100	٩N	AN	120	AN	AN	130	ΥN
2700	100	NA	NA	120	NA	NA	130	AA
RCCP Reinfo	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	te Culvert,	, Storm Dra	ain, and Sew	er Pipe			

Note Note

Polyvinyl Chloride Pipe Corrugated Polyvinyl Chloride Pipe Extra Strength Clay Pipe This material may be used for the given pipe diameter and fill height. 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."

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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

- 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, and the plan administrator of each fringe benefit, if applicable, 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."

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).

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 off-site as a non-special waste, special waste, or hazardous waste as applicable.
 - (2) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
 - (3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

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

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

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

Revise Article 669.14 of the Standard Specifications to read:

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

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

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

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

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

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 rightof-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)."

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

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

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 2 . In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

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

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

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

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

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

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

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

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

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

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

METHOD OF MEASUREMENT The unit of measurement is in hours.

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

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	
(c) High Strength Steel Bolts, Nuts, and Washers (Note 2)	

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.

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 110 working days.

TEMPORARY SOIL RETENTION SYSTEM

Effective: December 30, 2002 Revised : May 11, 2009

<u>Description.</u> This work shall consist of designing, furnishing, installing, adjusting for stage construction when required and subsequent removal of the temporary soil retention system according to the dimensions and details shown on the plans and in the approved design submittal.

<u>General.</u> The temporary soil retention system shall be designed by the Contractor as a minimum, to retain the exposed surface area specified in the plans or as directed by the Engineer.

The design calculations and details for the temporary soil retention system proposed by the Contractor shall be submitted to the Engineer for approval. The calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer. This approval will not relieve the Contractor of responsibility for the safety of the excavation. Approval shall be contingent upon acceptance by all involved utilities and/or railroads.

<u>Construction.</u> The Contractor shall verify locations of all underground utilities before installing any of the soil retention system components or commencing any excavation. Any disturbance or damage to existing structures, utilities or other property, caused by the Contractor's operation, shall be repaired by the Contractor in a manner satisfactory to the Engineer at no additional cost to the Department. The soil retention system shall be installed according to the Contractor's approved design, or as directed by the Engineer, prior to commencing any related excavation. If unable to install the temporary soil retention system as specified in the approved design, the Contractor shall have the adequacy of the design re-evaluated. Any reevaluation shall be submitted to the Engineer for approval prior to commencing the excavation adjacent to the area in question. The Contractor shall not excavate below the maximum excavation line shown in the approved design without the prior permission of the Engineer. The temporary soil retention system shall remain in place until the Engineer determines it is no longer required.

The temporary soil retention system shall be removed and disposed of by the Contractor when directed by the Engineer. When allowed, the Contractor may elect to cut off a portion of the temporary soil retention system leaving the remainder in place. The remaining temporary soil retention system shall be removed to a depth which will not interfere with the new construction, and as a minimum, to a depth of 12 in. (300 mm) below the finished grade, or as directed by the Engineer. Removed system components shall become the property of the Contractor.

When an obstruction is encountered, the Contractor shall notify the Engineer and upon concurrence of the Engineer, the Contractor shall begin working to break up, push aside, or remove the obstruction. An obstruction shall be defined as any object (such as but not limited to, boulders, logs, old foundations etc.) where its presence was not obvious or specifically noted on the plans prior to bidding, that cannot be driven or installed through or around, with normal driving or installation procedures, but requires additional excavation or other procedures to remove or miss the obstruction.

<u>Method of Measurement</u>. The temporary soil retention system furnished and installed according to the Contractor's approved design or as directed by the Engineer will be measured for payment in place, in square feet (square meters). The area measured shall be the vertical exposed surface area envelope of the excavation supported by temporary soil retention system. Portions of the temporary soil retention system left in place for reuse in later stages of construction shall only be measured for payment once.

Any temporary soil retention system installed beyond those dimensions shown on the contract plans or the approved contractor's design without the written permission of the Engineer, shall not be measured for payment but shall be done at the contractor's own expense.

Basis of Payment. This work will be paid for at the contract unit price per square foot (square meter) for TEMPORARY SOIL RETENTION SYSTEM.

Payment for any excavation, related solely to the installation and removal of the temporary soil retention system and/or its components, shall not be paid for separately but shall be included in the unit bid price for TEMPORARY SOIL RETENTION SYSTEM. Other excavation, performed in conjunction with this work, will not be included in this item but shall be paid for as specified elsewhere in this contract.

Obstruction mitigation shall be paid for according to Article 109.04 of the Standard Specifications.

PIPE UNDERDRAINS FOR STRUCTURES

Effective: May 17, 2000 Revised: January 22, 2010

<u>Description</u>. This work shall consist of furnishing and installing a pipe underdrain system as shown on the plans, as specified herein, and as directed by the Engineer.

Materials. Materials shall meet the requirements as set forth below:

The perforated pipe underdrain shall be according to Article 601.02 of the Standard Specifications. Outlet pipes or pipes connecting to a separate storm sewer system shall not be perforated.

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 16, according to Sections 1003 and 1004 of the Standard Specifications.

The fabric surrounding the drainage aggregate shall be Geotechnical Fabric for French Drains according to Article 1080.05 of the Standard Specifications.

<u>Construction Requirements.</u> All work shall be according to the applicable requirements of Section 601 of the Standard Specifications except as modified below.

The pipe underdrains shall consist of a perforated pipe drain situated at the bottom of an area of drainage aggregate wrapped completely in geotechnical fabric and shall be installed to the lines and gradients as shown on the plans.

<u>Method of Measurement.</u> Pipe Underdrains for Structures shall be measured for payment in feet (meters), in place. Measurement shall be along the centerline of the pipe underdrains. All connectors, outlet pipes, elbows, and all other miscellaneous items shall be included in the measurement. Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures, but shall not be included in the measurement for payment.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per foot (meter) for PIPE UNDERDRAINS FOR STRUCTURES of the diameter specified. Furnishing and installation of the drainage aggregate, geotechnical fabric, forming holes in structural elements and any excavation required, will not be paid for separately, but shall be included in the cost of the pipe underdrains for structures.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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

ATTACHMENTS

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

I. GENERAL

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

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

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

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

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

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

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

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

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

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

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or onthe-job training."

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

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

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

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If

the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

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

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

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

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

IV. Davis-Bacon and Related Act Provisions

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

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

1. Minimum wages

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

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

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

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

 $\ensuremath{\text{(ii)}}$ The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

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

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(1) The contractor shall submit weekly for each week in which b. any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose Wage and Hour Division Web from the site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such

contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers not participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<u>https://www.epls.gov/</u>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with

commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<u>https://www.epls.gov/</u>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

NOTICE

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at <u>http://www.dot.state.il.us/desenv/delett.html</u>.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at http://www.dot.state.il.us/desenv/subsc.html.

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