BID PROPOSAL INSTRUCTIONS

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

PREQUALIFICATION

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

WHO CAN BID?

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

REQUESTS FOR AUTHORIZATION TO BID

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

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?

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

ABOUT AUTHORIZATION TO BID

Firms that have not received an Authorization to Bid or Not For Bid Report within a reasonable time of complete and correct original document submittal should contact the Department as to the status. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions.

ADDENDA AND REVISIONS

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

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

The Internet is the Department's primary way of doing business. The subscription service emails are an added courtesy the Department provides. It is suggested that bidders check IDOT's website at 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 Timothy.Garman@illinois.gov.

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, do not include the blank pages of the schedule of prices that came with the proposal package.
☐ Page 4 (Item 9) — Check "YES" if you will use a subcontractor(s) with an annual value over \$50,000. Include the subcontractor(s) name, address, general type of work to be performed and the dollar amount. If you will use subcontractor(s) but are uncertain who or the dollar amount; check "YES" but leave the lines blank.
After page 4 – Insert the following documents: The Illinois Office Affidavit (Not applicable to federally funded projects) followed by Cost Adjustments for Steel, Bituminous and Fuel (if applicable) and the Contractor Letter of Assent (if applicable). The general rule should be, if you don't know where it goes, put it after page 4.
☐ Page 10 (Paragraph J) – Check "YES" or "NO" whether your company has any business in Iran.
☐ Page 10 (Paragraph K) — (Not applicable to federally funded projects) List the name of the apprenticeship and training program sponsor holding the certificate of registration from the US Department of Labor. If no applicable program exists, please indicate the work/job category Your bid will not be read if this is not completed. Do not include certificates with your bid. Keep the certificates in your office in case they are requested by IDOT.
☐ Page 11 (Paragraph L) – A copy of your State Board of Elections certificate of registration is no longer required with your bid.
☐ Page 11 (Paragraph M) – Indicate if your company has hired a lobbyist in connection with the job for which you are submitting the bid proposal.
☐ Page 12 (Paragraph C) – This is a work sheet to determine if a completed Form A is required. It is not part of the form and you do not need to make copies for each completed Form A.
Pages 14-17 (Form A) – One Form A (4 pages) is required for each applicable person in your company. Copies of the forms can be used and only need to be changed when the information changes. The certification signature and date must be original for each letting. Do not staple the forms together. If you answered "NO" to all of the questions in Paragraph C (page 12), complete the first section (page 14) with your company information and then sign and date the Not Applicable statement on page 17.
Page 18 (Form B) - If you check "YES" to having other current or pending contracts it is acceptable to use the phrase, "See Affidavit of Availability on file". Ownership Certification (at the bottom of the page) - Check N/A if the Form A(s) you submitted accounts for 100 percent of the company ownership. Check YES if any percentage of ownership falls outside of the parameters that require reporting on the Form A. Checking NO indicates that the Form A(s) you submitted is not correct and you will be required to submit a revised Form A.
☐ 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 you using the current Proposal Bid Bond form provided in the proposal package. the Proposal Bid Bond. If you are using an electronic bond, include your bid the Proof of Insurance printed from the Surety's Web Site.	The Power of Attorney page should be stapled to
☐ Disadvantaged Business Utilization Plan and/or Good Faith Effort – T Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SB documentation of a Good Faith Effort, it is to follow the SBE Forms.	
The Bid Letting is now available in streaming Audio/Video from the IDOT the main page of the current letting on the day of the Letting. The stream will bids does not begin until approximately 10:30 AM.	T Web Site. A link to the stream will be placed on not begin until 10 AM. The actual reading of the
Following the Letting, the As-Read Tabulation of Bids will be posted by the en Web page for the current letting.	nd of the day. You will find the link on the main
QUESTIONS: pre-letting up to execution of the contract	
Contractor pre-qualification	217-782-3413
Small Business, Disadvantaged Business Enterprise (DBE)	
Contracts, Bids, Letting process or Internet downloads	
Estimates Unit	
Aeronautics	
IDNR (Land Reclamation, Water Resources, Natural Resources)	217-782-6302
QUESTIONS: following contract execution	
Subcontractor documentation, payments	217-782-3413
Railroad Insurance	217-785-0275

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Proposal Submitted By	
Name	
Address	
City	

Letting January 17, 2014

NOTICE TO PROSPECTIVE BIDDERS

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

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL

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



Springfield, Illinois 62764

Contract No. 63881 COOK County Section 13-00125-00-PV (Melrose Park) Route CORNELL AVENUE Project M-4003(177) District 1 Construction Funds

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

Prepared by

F

Checked by

(Printed by authority of the State of Illinois)

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PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

District 1 Construction Funds

1. Proposal of	
Taxpayer Identification Number (Mandatory)	
For the improvement identified and advertised for bids in the Invitation	n for Bids as:
Contract No. 63881 COOK County Section 13-00125-00-PV (Melrose Park) Project M-4003(177) Route CORNELL AVENUE	

This project consists of pavement reconstruction, installation of storm sewers, drainage structures and water main, curb and gutter removal and replacement, sidewalk removal and replacement, topsoil, sod and pavement markings located on Cornell Avenue from Armitage Avenue to North Avenue in the Village of Melrose Park.

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

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

<u>A</u>	mount o	of Bid	Proposal <u>Guaranty</u>	<u>Am</u>	ount c		roposal luaranty
Up to		\$5,000	\$150	\$2,000,000	to	\$3,000,000\$	\$100,000
\$5,000	to	\$10,000	\$300	\$3,000,000	to	\$5,000,000\$	\$150,000
\$10,000	to	\$50,000	\$1,000	\$5,000,000	to	\$7,500,000\$	250,000
\$50,000	to	\$100,000	\$3,000	\$7,500,000	to	\$10,000,000\$	3400,000
\$100,000	to	\$150,000	\$5,000	\$10,000,000	to	\$15,000,000\$	\$500,000
\$150,000	to	\$250,000	\$7,500	\$15,000,000	to	\$20,000,000\$	600,000
\$250,000	to	\$500,000	\$12,500	\$20,000,000	to	\$25,000,000\$	\$700,000
\$500,000	to	\$1,000,000	\$25,000	\$25,000,000	to	\$30,000,000	000,008
\$1,000,000	to	\$1,500,000	\$50,000	\$30,000,000	to	\$35,000,000\$	3900,000
\$1,500,000	to	\$2,000,000	\$75,000	over		\$35,000,000 \$1	,000,000

Bank cashier's checks or properly certified checks accompanying bid proposals will be made payable to the Treasurer, State of Illinois.

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

The amount of the proposal guaranty check is	\$(). If this proposal is accepted
and the undersigned will fail to execute a contract bond as required herein, it is hereby	y agreed that the amount of	the proposal guaranty will become the
property of the State of Illinois, and shall be considered as payment of damages due	e to delay and other causes	s suffered by the State because of the
failure to execute said contract and contract bond; otherwise, the bid bond will bec	ome void or the proposal	guaranty check will be returned to the
undersigned.		

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

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

6.	following the comb proportion	combination bid not to the total contraction to the bic	OS. The undersigned bidder further agrees that if awarded the on, he/she will perform the work in accordance with the requirement specified in the schedule below, and that the combination bid is submitted for the same. If an error is found to exist in the gross a combination, the combination bid shall be corrected as provide	ents of each individual contract comprising shall be prorated against each section in s sum bid for one or more of the individual
			combination bid is submitted, the schedule below must be cong the combination.	mpleted in each proposal
			te bids are submitted for one or more of the sections compri- tion bid must be submitted for each alternate.	sing the combination, a
			Schedule of Combination Bids	
Со	mbination No.	l	Sections Included in Combination	Combination Bid Dollars Cents
	110.		Geotions included in Combination	Donais Cents
7.	schedule all extens schedule is an erro will be man The sche provided	of prices f sions and are approx or in the ex ade only for eduled qual elsewhere	RICES. The undersigned bidder submits herewith, in accordant or the items of work for which bids are sought. The unit prices I summations have been made. The bidder understands that ximate and are provided for the purpose of obtaining a gross surtension of the unit prices, the unit prices will govern. Payment to ractual quantities of work performed and accepted or materials ntities of work to be done and materials to be furnished may be in the contract.	bid are in U.S. dollars and cents, and the quantities appearing in the bid in for the comparison of bids. If there is the contractor awarded the contract is furnished according to the contract. Increased, decreased or omitted as
8.	500/20-43	3) provides	O BUSINESS IN ILLINOIS. Section 20-43 of the Illinois Proceeds that a person (other than an individual acting as a sole proprieto state of Illinois prior to submitting the bid.	
9.	Departme and make Purchasin Neither	ent procure e payments ng Officer the CPO i	CONTRACT: The Department of Transportation will, in accements, execute the contract and shall be the sole entity having a under the contract. Execution of the contract by the Chief Pro (SPO) is for approval of the procurement process and execution or the SPO shall be responsible for administration of the coment there under except as otherwise permitted in the Code.	the authority to accept performance ocurement Officer (CPO) or the State n of the contract by the Department.
10.	The serv	ices of a s	subcontractor will be used.	
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	their		contractors with subcontracts with an annual value of more than fress, general type of work to be performed, and the dollar allocat 0-120)	

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STATE JOB #- C-91-237-13 PPS NBR -

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ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 63881

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NOTE:

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

TOTAL

2. THE UNIT PRICE SHALL GOVERN IF NO TOTAL PRICE IS SHOWN OR IF THERE IS A DISCREPANCY BETWEEN THE PRODUCT OF THE UNIT PRICE MULTIPLIED BY THE QUANTITY.

3. IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.

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.
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II. ASSURANCES

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

A. Conflicts of Interest

Section 50-13. Conflicts of Interest.

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

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

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

B. Negotiations

Section 50-15. Negotiations.

It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.

The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

C. Inducements

Section 50-25. Inducement.

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

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

D. Revolving Door Prohibition

Section 50-30. Revolving door prohibition.

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

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

E. Reporting Anticompetitive Practices

Section 50-40. Reporting anticompetitive practices.

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

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

F. Confidentiality

Section 50-45. Confidentiality.

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

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

G. Insider Information

Section 50-50. Insider information.

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

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

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

III. CERTIFICATIONS

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

A. Bribery

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
 - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
 - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
 - (1) the business has been finally adjudicated not guilty; or
 - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 2012.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

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

B. Felons

Section 50-10. Felons.

- (a) Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.
- (b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

C. Debt Delinquency

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

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

D. Prohibited Bidders, Contractors and Subcontractors

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

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

E. Section 42 of the Environmental Protection Act

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

F. Educational Loan

Section 3 of the Educational Loan Default Act provides no State agency shall contract with an individual for goods or services if that individual is in default, as defined in Section 2 of this Act, on an educational loan. Any contract used by any State agency shall include a statement certifying that the individual is not in default on an educational loan as provided in this Section.

The bidder, if an individual as opposed to a corporation, partnership or other form of business organization, certifies that the bidder is not in default on an educational loan as provided in Section 3 of the Act.

G. Bid-Rigging/Bid Rotating

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

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

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

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

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

H. International Anti-Boycott

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

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

I. Drug Free Workplace

The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.

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

J. Disclosure of Business Operations in Iran

Chack the appropriate statement.

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

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

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

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

oricon the appro	phate statement.
//	Company has no business operations in Iran to disclose.
//	Company has business operations in Iran as disclosed the attached document.

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

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

NA-FEDERAL		

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

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

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

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

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

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

M. Lobbyist Disclosure

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

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

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

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

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

	Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with this contract.
Or	
	Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract:
	l address of person:ees, compensation, reimbursements and other remuneration paid to said person:
☐ Lackn	owledge, understand and accept these terms and conditions for the above certifications.

IV. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

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

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

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

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

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

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

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

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

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

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

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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A **Financial Information & Potential Conflicts of Interest Disclosure**

Contractor Name		
Legal Address		
O'the Otate 7's		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

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

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

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

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

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

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

3.

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Financial Related Information Disclosure

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
Disclosure of the information contained in This information shall become part of the n excess of \$25,000, and for all open-en DISCLOSURE OF OTHE	publicly available contract file. This Fo	rm B must be completed for bids
Identifying Other Contracts & Prochas any pending contracts (including lease)	curement Related Information. The Bases), bids, proposals, or other ongoinges No	IDDER shall identify whether it procurement relationship with
2. If "Yes" is checked. Identify each s information such as bid or project numb INSTRUCTIONS:		nois agency name and other descriptive ry). SEE DISCLOSURE FORM
THE F	FOLLOWING STATEMENT MUST BE	CHECKED
	Signature of Authorized Representative	Date
	OWNERSHIP CERTIFICATION	<u>ON</u>
Please certify that the following sta	atement is true if the individuals for all	submitted Form A disclosures do not total
	interest is held by individuals receivistributive income or holding less than a	ing less than \$106,447.20 of the bidding a 5% ownership interest.
☐ Yes ☐ No ☐ N	/A (Form A disclosure(s) established 10	00% ownership)

SPECIAL NOTICE TO CONTRACTORS

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

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

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

Duration of Project:



PART I. IDENTIFICATION
Dept. Human Rights #

Contract No. 63881 COOK County Section 13-00125-00-PV (Melrose Park) Project M-4003(177) Route CORNELL AVENUE District 1 Construction Funds

Name of Bidder:																		
PART II. WORKFO A. The undersigned which this contract wo projection including a	bidder hark is to be	as analyz e perform	ed mir ed, an	d for th d fema	ne locat	ions fro	m whi	ch the b	idder re	ecruits	employe	es, and h	ereb	y subm	its the fo	lowir con	ng workfo	ı rce
TOTAL Workforce Projection for Contract CURRENT EMPLOYEES																		
	TO BE ASSIGNED MINORITY EMPLOYEES TRAINEES TO CONTRACT																	
JOB	ТО	TAL		MIN	JRITY	EMPLC		HER	APPI			HE JOB	-	TC	TAL	T	MINC	RITY
CATEGORIES	EMPL	OYEES		ACK		HISPANIC MINOR.				TRA	TRAINEES		EMPLOYEES			EMPLOYEES M F		
OFFICIALS (MANAGERS)	M	F	М	F	М	F	М	F	М	F	M	F	•	M	F		M	<u> </u>
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS													-					
MECHANICS																		
TRUCK DRIVERS													•					
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS													•					
PAINTERS																		
LABORERS, SEMI-SKILLED													•					
LABORERS, UNSKILLED																		
TOTAL																		
т		BLE C	oioatio	n for C	`antraat				7			FOR	DE	PARTM	IENT US	E ON	ILY	
EMPLOYEES	OTAL Tra	aining Pro TAL	ojectio 	ii ior C	ontract		*0	THER	1									
IN	_	OYEES	BL	ACK	HISF	ANIC		NOR.										
TRAINING APPRENTICES	М	F	М	F	М	F	М	F	-									
ON THE JOB TRAINEES									1									
	ther minori	ties are def	ined as	Asians ((A) or Nat	ive Ame	ricans (N	V).	_									

Note: See instructions on page 2

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

BC 1256 (Rev. 12/11/07)

Contract No. 63881 COOK County Section 13-00125-00-PV (Melrose Park) Project M-4003(177) Route CORNELL AVENUE District 1 Construction Funds

PART II. WORKFORCE PROJECTION - continued

	 Included in "Total Employees" under Table A is the total nu event the undersigned bidder is awarded this contract. 	mber of new hires tha	at would be employed in the
	The undersigned bidder projects that: (number)		new hires would be
	The undersigned bidder projects that: (number) recruited from the area in which the contract project is loca new hires would be	ted; and/or (number)	ea in which the bidder's principal
	office or base of operation is located.		
	. Included in "Total Employees" under Table A is a projection undersigned bidder as well as a projection of numbers of p		
	The undersigned bidder estimates that (number) be directly employed by the prime contractor and that (numemployed by subcontractors.	iber)	persons will be
PART II	III. AFFIRMATIVE ACTION PLAN		
	The undersigned bidder understands and agrees that in utilization projection included under PART II is determined in any job category, and in the event that the undersigner commencement of work, develop and submit a written (geared to the completion stages of the contract) where utilization are corrected. Such Affirmative Action Plan will the Department of Human Rights .	to be an underutilizated bidder is awarded Affirmative Action Placeby deficiencies in n	ion of minority persons or women this contract, he/she will, prior to an including a specific timetable ninority and/or female employee
	The undersigned bidder understands and agrees that the n submitted herein, and the goals and timetable included und to be part of the contract specifications.		
Compa	pany	Telephone Numb	er
Addres	ess		
	NOTICE REGARDING	SIGNATURE	
	Bidder's signature on the Proposal Signature Sheet will constitute to completed only if revisions are required.	he signing of this form.	The following signature block needs
Signatu	ature: 🗆	Title:	Date:
Instruction	ctions: All tables must include subcontractor personnel in addition to pri	me contractor personnel.	
Table A	 A - Include both the number of employees that would be hired to (Table B) that will be allocated to contract work, and include all should include all employees including all minorities, apprentices 	apprentices and on-the-job	trainees. The "Total Employees" column
Table B	B - Include all employees currently employed that will be allocated to currently employed.	o the contract work includin	g any apprentices and on-the-job trainees
Table C	C - Indicate the racial breakdown of the total apprentices and on-the	-job trainees shown in Tabl	e A.
			DO 1050 (D 10/11/07)

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

Contract No. 63881 COOK County Section 13-00125-00-PV (Melrose Park) Project M-4003(177) Route CORNELL AVENUE 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	
Signature of Owner	
Business Address	
Firm Name	
Ву	
Business Address	
	Name and Address of All Members of the Firm:
Corporate Name	
Ву	Signature of Authorized Representative
	Signature of Authorized Representative
	Typed or printed name and title of Authorized Representative
	, ,
Attest	Signature
Duningan Addungan	
Business Address	
Corporate Name	
-,	Signature of Authorized Representative
	Typed or printed name and title of Authorized Representative
	Typed of printed name and title of Authorized Representative
Attest	
	Signature
Business Address	
nlease attach an addit	onal signature sheet
	Signature of Owner Business Address Firm Name By Business Address Corporate Name By Attest Business Address Corporate Name By

Illinois Department of Transportation

Return with Bid (If Applicable)

Division of Highways Annual Proposal Bid Bond

This Annual Proposal Bid Bond shall become effective at 12:01 AM (CD	ST) on and shall be valid until 11:59 PM (CDST).
KNOW ALL MEN BY THESE PRESENTS, That We	
as PRINCIPAL, and	
amount specified in the bid proposal under "Proposal Guaranty" in effe	TE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the ct on the date of the Invitation for Bids, whichever is the lesser sum, well and hich we bind ourselves, our heirs, executors, administrators, successors and
	at whereas, the PRINCIPAL may submit bid proposal(s) to the STATE OF mprovements published in the Transportation Bulletin during the effective term
specified in the bidding and contract documents; and if, after award by the terms of the bidding and contract documents including evidence of good and sufficient surety for the faithful performance of such contract thereof; or if, in the event of the failure of the PRINCIPAL to enter in Department the difference not to exceed the penalty hereof between the	sal(s) of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as the Department, the PRINCIPAL shall enter into a contract in accordance with the required insurance coverages and providing such bond as specified with and for the prompt payment of labor and material furnished in the prosecution to such contract and to give the specified bond, the PRINCIPAL pays to the me amount specified in the bid proposal and such larger amount for which the ed by said bid proposal, then this obligation shall be null and void, otherwise, it
In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer day of A.D.,	In TESTIMONY WHEREOF, the said SURETY has caused this instrument to be signed by its officer day of A.D.,
(Company Name)	(Company Name)
By (Signature and Title)	By(Signature of Attorney-in-Fact)
,	
Notary for PRINCIPAL	Notary for SURETY
STATE OF	STATE OF
COUNTY OF	COUNTY OF
Signed and attested before me on (date) by	Signed and attested before me on (date)
(Name of Person)	(Name of Person)
(Seal) (Signature of Notary Public)	(Seal) (Signature of Notary Public)
(Date Commission Expires)	(Date Commission Expires)
	id Bond form, the Principal may file an Electronic Bid Bond. By signing bid bond has been executed and the Principal and Surety are firmly and as shown above.
Electronic Bid Bond ID # Company/Bidder Name	Signature and Title

Illinois Department of Transportation

Return with Bid

Division of Highways Proposal Bid Bond

		Item No.	
		Letting Dat	e
(NOW ALL PERSONS BY T	HESE PRESENTS, That We		
as PRINCIPAL, and			
he amount specified in the b	lly, severally and firmly bound unto the ST id proposal under "Proposal Guaranty" in a STATE OF ILLINOIS, for the payment of	effect on the date of the Invitation fo	or Bids, whichever is the lesser sum, well
	E FOREGOING OBLIGATION IS SUCH the Department of Transportation, for the impr		
specified in the bidding and of with the terms of the bidding with good and sufficient sure prosecution thereof; or if, in to pays to the Department the d	the Department shall accept the bid propo- contract documents; and if, after award be and contract documents including evidence ty for the faithful performance of such contract of the failure of the PRINCIPAL difference not to exceed the penalty hereof contract with another party to perform the vill force and effect.	y the Department, the PRINCIPAL ce of the required insurance coverage contract and for the prompt payment to enter into such contract and to between the amount specified in the	shall enter into a contract in accordance les and providing such bond as specified at of labor and material furnished in the give the specified bond, the PRINCIPAL bid proposal and such larger amount for
hen Surety shall pay the per vithin such period of time, th	rtment determines the PRINCIPAL has fa nal sum to the Department within fifteen e Department may bring an action to colle irred in any litigation in which it prevails eit	(15) days of written demand thereforect the amount owed. Surety is liable	or. If Surety does not make full paymen
n TESTIMONY WHEREC caused this instrument to l day of	PF, the said PRINCIPAL has be signed by its officer A.D.,	In TESTIMONY WHEREOF, instrument to be signed by it day of	the said SURETY has caused this s officer A.D.,
(Con	npany Name)	(Com	npany Name)
·	ipany Name)	·	ipany Name)
By(Si	gnature and Title)	By(Signatu	re of Attorney-in-Fact)
lotary for PRINCIPAL	,	Notary for SURETY	• ,
STATE OF		STATE OF	
COUNTY OF		COUNTY OF	
Signed and attested before	e me on (date)	Signed and attested before r	ne on (date)
(Nan	ne of Person)	(Nam	ne of Person)
Seal)		(Seal)	
 /	(Signature of Notary Public)	_	(Signature of Notary Public)
	(Date Commission Expires)	-	(Date Commission Expires)
proposal the Principal is	bove section of the Proposal Bid Bon ensuring the identified electronic bid nois under the conditions of the bid b	bond has been executed and	

Company/Bidder Name

Electronic Bid Bond ID #

Signature and Title



DBE Utilization Plan

(1) Policy

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

(2) Obligation

Date

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

(3) Pro	ject and Bid Identification			
Complet	te the following information concerning the project and bid:			
Route		Total Bid		_
Section		Contract DBE Goal		
Project			(Percent)	(Dollar Amount)
County				
Letting [Date			
Contrac	t No.			
Letting I	Item No.			
(4) Ass	surance			
	in my capacity as an officer of the undersigned bidder (or bidding company: (check one) Meets or exceeds contract award goals and has provided do Disadvantaged Business Participation percent Attached are the signed participation statements, forms SBE use of each business participating in this plan and assuring the work of the contract. Failed to meet contract award goals and has included good for provided participation as follows: Disadvantaged Business Participation percent The contract goals should be accordingly modified or waiv support of this request including good faith effort. Also a required by the Special Provision evidencing availability and	cumented participation as fort 2025, required by the Spectat each business will perfort aith effort documentation to the ed. Attached is all informattached are the signed participation.	cial Provision evident a commercial meet the goals a stion required by articipation state	dencing availability and ly useful function in the and that my company has the Special Provision in the ments, forms SBE 2025,
	business will perform a commercially useful function in the wo			
Bv	Company	The "as read" Low Bidder is re		•
•		Submit only one utilization pla submitted in accordance with		
Title		Bureau of Small Business Ent	erprises	Local Let Projects

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

2300 South Dirksen Parkway

Springfield, Illinois 62764

Submit forms to the

Local Agency

(P)	Illinois Department of Transportation		D	BE Participatio	n Statement
Subcontract	tor Registration		L	etting	
Participation	on Statement		lt	em No.	
(1) Instruct	ions		C	Contract	
be submitte	nust be completed for each disadvantaged bused in accordance with the special provision and pace is needed complete an additional form for	d will be attached			
(2) Work					
Pay Item No.	Description	Qı	ıantity	Unit Price	Total
		·		Total	
	Payment Items he above items which are partial pay items, sp	pecifically describ	e the wo	rk and subcontrac	t dollar
(4) Commitment The undersigned certify that the information included herein is true and correct, and that the DBE firm listed below has agreed to perform a commercially useful function in the work of the contract item(s) listed above and to execute a contract with the prime contractor. The undersigned further understand that no changes to this statement may be made without prior approval from the Department's Bureau of Small Business Enterprises and that complete and accurate information regarding actual work performed on this project and the payment therefore must be provided to the Department.					
	Signature for Prime Contractor		Sig	nature for DBE Firm	
Title		Title			
Date		Date			
Contact		Contact Pe	erson		
Phone		Phone			
Firm Name		Firm Name)		
Address _					
City/State/Z	Zip	City/State/2	Zip		

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

WC _____

E _____

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

lame:	
address:	
Phone No.	

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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

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

Contract No. 63881 COOK County Section 13-00125-00-PV (Melrose Park) Project M-4003(177) Route CORNELL AVENUE 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. <u>Debt Delinquency</u>

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

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

D. Prohibited Bidders, Contractors and Subcontractors

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

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

E. Section 42 of the Environmental Protection Act

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

Name of Subcontracting Company

Authorized Officer

Date

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

SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

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

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

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

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

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

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

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

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

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

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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

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

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

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

FOR INDIVIDUAL (type or print information)

DISCLOSURE OF FINANCIAL INFORMATION

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

NAN	re-
NAM	
ADD	RESS
Туре	of ownership/distributable income share:
stock % or	sole proprietorship Partnership other: (explain on separate shee
	sure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following onflict of interest relationships apply. If the answer to any question is "Yes", please attach additional describe.
(a) State e	mployment, currently or in the previous 3 years, including contractual employment of services. YesNo
If your a	answer is yes, please answer each of the following questions.
1.	Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? YesNo
2.	Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, provide the name the State agency for which you are employed and your annual salary.

	3.	If you are currently appointed to or employed by any agency of t salary exceeds 60% of the annual salary of the Governor, are yo (i) more than 7 1/2% of the total distributable income of your corporation, or (ii) an amount in excess of 100% of the annual salary	ou entitled to receive firm, partnership, association or
	4.	If you are currently appointed to or employed by any agency of the salary exceeds 60% of the annual salary of the Governor, are your minor children entitled to receive (i) more than 15% in the income of your firm, partnership, association or corporation, or the salary of the Governor?	ou and your spouse aggregate of the total distributable
(b)		employment of spouse, father, mother, son, or daughter, includir previous 2 years.	ng contractual employment services YesNo
	If	your answer is yes, please answer each of the following question	
	1.	Is your spouse or any minor children currently an officer or empl Board or the Illinois State Toll Highway Authority?	oyee of the Capitol Development YesNo
		Is your spouse or any minor children currently appointed to or er of Illinois? If your spouse or minor children is/are currently agency of the State of Illinois, and his/her annual salary ex annual salary of the Governor, provide the name of your spouse of the State agency for which he/she is employed and his/her an	appointed to or employed by any ceeds 60% of the and/or minor children, the name
	3.	If your spouse or any minor children is/are currently appointed to State of Illinois, and his/her annual salary exceeds 60% of the are you entitled to receive (i) more than 71/2% of the total distribution, partnership, association or corporation, or (ii) an amout annual salary of the Governor?	nnual salary of the Governor, utable income of your
	4.	If your spouse or any minor children are currently appointed to State of Illinois, and his/her annual salary exceeds 60% of the are you and your spouse or minor children entitled to receive aggregate of the total distributable income of your firm, partner (ii) an amount in excess of two times the salary of the Governor?	nual salary of the Governor, (i) more than 15 % in the ship, association or corporation, or
(-)	- 1		YesNo
(C)	unit of	ve status; the holding of elective office of the State of Illinois, the glocal government authorized by the Constitution of the State of Illicurrently or in the previous 3 years.	
(d)		onship to anyone holding elective office currently or in the previour daughter.	s 2 years; spouse, father, mother, YesNo
(e)	Americ of the	ntive office; the holding of any appointive government office of the ca, or any unit of local government authorized by the Constitution State of Illinois, which office entitles the holder to compensation is charge of that office currently or in the previous 3 years.	of the State of Illinois or the statutes
		onship to anyone holding appointive office currently or in the previous daughter.	ous 2 years; spouse, father, mother, YesNo
(g)	Emplo	yment, currently or in the previous 3 years, as or by any registere	d lobbyist of the State government. YesNo

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

3

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Subcontractor: Other Contracts & Financial Related Information Disclosure

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

Illinois Department of Transportation

NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation. Electronic bids are to be submitted to the electronic bidding system (ics-Integrated Contractors Exchange). Paper-based bids are to be submitted to the Chief Procurement Officer for the Department of Transportation in care of the Chief Contracts Official at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.mJanuary 17, 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. 63881 COOK County Section 13-00125-00-PV (Melrose Park) Project M-4003(177) Route CORNELL AVENUE District 1 Construction Funds

This project consists of pavement reconstruction, installation of storm sewers, drainage structures and water main, curb and gutter removal and replacement, sidewalk removal and replacement, topsoil, sod and pavement markings located on Cornell Avenue from Armitage Avenue to North Avenue in the Village of Melrose Park.

- 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 63881

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)

SUPPLEMENTAL SPECIFICATIONS

Sta. Spe		e No.
101	Definition of Terms	
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106	Control of Materials	5
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36		Preventive Maintenance - Micro-Surfacing (Eff. 1-1-09) (Rev. 1-1-12)	
37		Preventive Maintenance – Slurry Seal (Eff. 1-1-09) (Rev. 1-1-12)	
38		Temporary Raised Pavement Markers (Eff. 1-1-09) (Rev. 1-1-14)	
39		Restoring Bridge Approach Pavements Using High-Density Foam (Eff. 1-1-09) (Rev. 1-1-12)	

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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LR 102-2 LR 105 LR 107-2 LR 107-4	136 139		Bidding Requirements and Conditions for Contract Proposals Cooperation with Utilities Railroad Protective Liability Insurance for Local Lettings Insurance	Jan. 1, 2001 Jan. 1, 1999 Mar. 1, 2005 Feb. 1, 2007	Jan. 1, 2014 Jan. 1, 2007 Jan. 1, 2006 Aug. 1, 2007
LR 107-7 LR 108 LR 109 LR 212			Wages of Employees on Public Works Combination Bids Equipment Rental Rates	Jan. 1, 1999 Jan. 1, 1994 Jan. 1, 2012	Jan. 1, 2014 Mar. 1, 2005
LR 355-1 LR 355-2 LR 400-1			Shaping Roadway Bituminous Stabilized Base Course, Road Mix or Traveling Plant Mix Bituminous Stabilized Base Course, Plant Mix Bituminous Treated Earth Surface	Aug. 1, 1969 Oct. 1, 1973 Feb. 20, 1963 Jan. 1, 2007	Jan. 1, 2002 Jan. 1, 2007 Jan. 1, 2007 Apr. 1, 2012
LR 400-2 LR 400-3 LR 400-4 LR 400-5			Bituminous Surface Plant Mix (Class B) Hot In-Place Recycling (HIR) – Surface Recycling Full-Depth Reclamation (FDR) with Emulsified Asphalt Cold In-Place Recycling (CIR) With Emulsified Asphalt	Jan. 1, 2008 Jan. 1, 2012 Apr. 1, 2012 Apr. 1, 2012	Jun. 1, 2012 Jun. 1, 2012
LR 400-6 LR 400-7 LR 402			Cold In Place Recycling (CIR) with Foamed Asphalt Full-Depth Reclamation (FDR) with Foamed Asphalt Salt Stabilized Surface Course	June 1, 2012 June 1, 2012 Feb. 20, 1963	Jan. 1, 2007
LR 403-1 LR 403-2			Surface Profile Milling of Existing, Recycled or Reclaimed Flexible Pavement Bituminous Hot Mix Sand Seal Coat	Apr. 1, 2012 Aug. 1, 1969	Jun. 1, 2012 Jan. 1, 2007
LR 406 LR 420 LR 442			Filling HMA Core Holes with Non-shrink Grout PCC Pavement (Special) Bituminous Patching Mixtures for Maintenance Use	Jan. 1, 2008 May 12, 1964 Jan. 1, 2004	Jan. 2, 2007 Jun. 1, 2007
LR 451 LR 503-1 LR 503-2			Crack Filling Bituminous Pavement with Fiber-Asphalt Furnishing Class SI Concrete Furnishing Class SI Concrete (Short Load)	Oct. 1, 1991 Oct. 1, 1973 Jan. 1, 1989	Jan. 1, 2007 Jan. 1, 2002 Jan. 1, 2002
LR 542 LR 663 LR 702		\sqcap	Pipe Culverts, Type (Furnished) Calcium Chloride Applied Construction and Maintenance Signs	Sep. 1, 1964 Jun. 1, 1958 Jan. 1, 2004	Jan. 1, 2007 Jan. 1, 2007 Jun. 1, 2007
LR 1000-1 LR 1000-2			Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with Emulsified Asphalt Mix Design Procedures Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with	Apr. 1, 2012 June 1, 2012	Jun. 1, 2012
LR 1004 LR 1030 LR 1032-1 LR 1102			Foamed Asphalt Mix Design Procedures Coarse Aggregate for Bituminous Surface Treatment Growth Curve Emulsified Asphalts Road Mix or Traveling Plan Mix Equipment	Jan. 1, 2002 Mar. 1, 2008 Jan. 1, 2007 Jan. 1, 2007	Jan. 1, 2007 Jan. 1, 2010 Feb. 7, 2008

BDE SPECIAL PROVISIONS For the January 17 and February 28, 2014 Lettings

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

<u>File Name</u>	Pg.		Special Provision Title	Effecti		Revised
80240	140	Χ	Above Grade Inlet Protection		, 2009	Jan. 1, 2012
* 80099		80.08 B.	Accessible Pedestrian Signals (APS)	April 1		Jan. 1, 2014
80274			Aggregate Subgrade Improvement	April 1		Jan. 1, 2013
80192			Automated Flagger Assistance Device		, 2008	
80173			Bituminous Materials Cost Adjustments	Nov. 2	•	Aug. 1, 2013
80241			Bridge Demolition Debris	•	, 2009	
50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1		April 1, 2010
50481			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1	•	April 1, 2010
50491			Building Removal-Case III (Friable Asbestos)	Sept. 1		April 1, 2010
50531			Building Removal-Case IV (No Asbestos)	Sept. 1		April 1, 2010
80292			Coarse Aggregate in Bridge Approach Slabs/Footings	April 1		April 1, 2013
80310			Coated Galvanized Steel Conduit		, 2013	
80198			Completion Date (via calendar days)	April 1		
80199			Completion Date (via calendar days) Plus Working Days	April 1		
80293			Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1	, 2012	
80294			Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of	April 1	, 2012	
			Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet	•		
80311			Concrete End Sections for Pipe Culverts	Jan. 1	, 2013	
* 80277			Concrete Mix Design – Department Provided	Jan. 1	, 2012	Jan. 1, 2014
* 80261	142	X	Construction Air Quality - Diesel Retrofit	June 1	, 2010	Jan. 1, 2014
80029	145	Х	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	155	Х	Granular Materials	Nov. 1	, 2012	White and the facility of the second of the
80304			Grooving for Recessed Pavement Markings	Nov. 1	, 2012	Jan. 1, 2013
80246	156	Х	Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1	, 2010	April 1, 2012
80322			Hot-Mix Asphalt – Mixture Design Composition and Volumetric Requirements	Nov 1	, 2013	
80323			Hot-Mix Asphalt – Mixture Design Verification and Production	Nov 1	, 2013	
80315			Insertion Lining of Culverts		, 2013	Nov 1, 2013
80324	158	Χ	LRFD Pipe Culvert Burial Tables		, 2013	•
80325	178	Х	LRFD Storm Sewer Burial Tables		, 2013	
80045			Material Transfer Device	June 15	•	Jan. 1, 2009
80165			Moisture Cured Urethane Paint System	Nov. 1	•	Jan. 1, 2010
* 80330			Pavement Marking for Bike Symbol	Jan. 1	, 2014	sapromoranje vijeka za objekte Samoranje samoranje samoranje
80298	CELOV P. P. ANDREW		Pavement Marking Tape Type IV	April 1		este participat este describe este apparate este apparate este apparate este apparate este apparate este appara
80254			Pavement Patching	•	, 2010	
* 80331	188	Χ	Payrolls and Payroll Records	estrer a pare estados en recotos.	, 2014	
* 80332			Portland Cement Concrete – Curing of Abutments and Piers		, 2014	
80326	190	Х	Portland Cement Concrete Equipment		, 2013	audicio centra fictio filiate con Problèma di Più Più Più Più
80300			Preformed Plastic Pavement Marking Type D - Inlaid		, 2012	
* 80328	191	X	Progress Payments		2013	
* 80281	192	Х	Quality Control/Quality Assurance of Concrete Mixes	CONTRACT LANGE SEE SEASON OF	2012	Jan. 1, 2014
34261	193	Χ	Railroad Protective Liability Insurance		, 1986	Jan. 1, 2006
80157			Railroad Protective Liability Insurance (5 and 10)		, 2006	•
22.2.					-	

<u>File Name</u>	<u>Pg.</u>		Special Provision Title	Effective	Revised
80306			Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt	Nov. 1, 2012	Nov. 1, 2013
			Shingles (RAS)		
80327	195	Х	Reinforcement bars	Nov 1, 2013	
80283	197	Χ	Removal and Disposal of Regulated Substances	Jan. 1, 2012	Nov. 2, 2012
80319	201	Х	Removal and Disposal of Surplus Materials	Nov. 2, 2012	
80307			Seeding	Nov. 1, 2012	
80127			Steel Cost Adjustment	April 2, 2004	April 1, 2009
80317			Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	
80301	202	Х	Tracking the Use of Pesticides	Aug. 1, 2012	
* 80333		6.536)	Traffic Control Setup and Removal Freeway/Expressway	Jan. 1, 2014	
20338	203	Х	Training Special Provisions	Oct. 15, 1975	
80318			Traversable Pipe Grate	Jan. 1, 2013	April 1, 2013
80288	206	Х	Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2013
80302	210	Х	Weekly DBE Trucking Reports	June 2, 2012	
80289			Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	211	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	Effective	Revised
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
80224	Restoring Bridge Approach Pavements Using High- Density Foam	Recurring CS #39	Jan. 1, 2009	Jan. 1, 2012
80255	Stone Matrix Asphalt	Sections 406, 1003, 1004, 1030, and 1011	Jan. 1, 2010	Aug. 1, 2013
80143	Subcontractor Mobilization Payments	Article 109.12	April 2, 2005	April 1, 2011

File Name	Special Provision Title	New Location	Effective	Revised
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 D	ebris
_	Duilding Domoval C	

- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IVCompletion Date
- Completion Date Plus Working Days
 Training Special Provisions
- DBE Participation

- Material Transfer Device
- Railroad Protective Liability Insurance
- Working Days

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2012, herein referred to as the Standard Specifications, the latest edition of the "Illinois 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, herein referred to as the Specifications, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein which apply to and govern and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern the construction of:

CORNELL AVENUE
PROJECT M-4003(177)
VILLAGE SECTION 13-00125-00-PV
VILLAGE OF MELROSE PARK
COOK COUNTY
CONTRACT NO. 63881

LOCATION OF PROJECT

The project is located on Cornell Avenue beginning at North Avenue (IL 64) (Sta 0+44) and ending at Armitage Avenue (Station 26+58) for a total net and gross length of 2,614 feet (0.495 miles) within the Village of Melrose Park and in Cook County, Illinois.

DESCRIPTION OF PROJECT

This work consists of the removal of the existing pavement, removal and replacement of curb and gutter, driveway aprons, the public sidewalk including an 8' wide bike path within the west parkway), the installation of storm sewer and drainage structures, installation of a 12" Ductile Iron water main, aggregate base course, Portland Cement Concrete pavement, pavement marking, restoring certain disturbed parkways with topsoil and sod, installation of new electric conduit for the existing light poles and fixtures, and all other appurtenant work necessary to complete the project.

PROJECT STAGING AND LOCAL ACCESS

During the construction of the project, Cornell Avenue will remain open to through traffic from North Avenue to Armitage Avenue. However, the street will be signed and enforced as a One-Way northbound traffic throughout construction. The construction is planned to be broken up into three stages.

The Contractor will be required to follow the following staging plan:

- <u>Stage I Construction</u> as shown on the plans, the east side of the roadway will be constructed during this stage of the project. During this stage:
 - o The proposed storm sewer shall be installed under the centerline of the proposed roadway, as well as all drainage structures located on the west side of the street. Additionally, the existing catch basins located on the west side of the street will need to be temporarily tied into proposed manholes. These will be tied into the cored opening of the proposed manholes by means of temporary 12" pipe and will be paid for under the item, TEMPORARY DRAINAGE CONNECTION.
 - o The existing pavement will be saw-cut 4' west of the proposed centerline to facilitate the removal of the east side of the roadway. The existing pavement west of this saw-cut must be maintained during this stage.
 - o The proposed water main will be installed within the east parking lane during this stage of construction. All service connections will occur during Stage I of this project.
 - After the necessary utility improvements are completed, the Contractor will be required to complete the roadway reconstruction within this stage. The existing east portion of the roadway will be closed within this staged area.
 - Construction traffic will not be permitted to drive on the existing base or proposed aggregate subgrade improvement. All construction traffic must utilize the existing pavement as illustrated on the Maintenance of Traffic plans.
 - Temporary access will need to be maintained with the local businesses. Driveways will need to be constructed as notated on the Staging plans.
 - Once the curb and gutter, pavement, pavement markings and drainage improvements within this stage are complete, this area of roadway would be opened to traffic and used for non-construction vehicles during stage 2 and 3 of the staging plan.
- <u>Stage II Construction</u> as shown on the plans, the construction of the proposed southbound through lane will comprise the Stage II construction Area. During this stage:
 - o All sewer lateral connections and drainage structures on the west side of the street will be installed within this stage of construction.
 - o All trenches created west of the Stage 2 limits of improvements will receive an asphalt capping, paid for under the item, TEMPORARY PAVEMENT.
 - o The existing pavement west of the improvements planned for this stage is to remain throughout the construction of this roadway for construction traffic access. Construction traffic will not be permitted to utilize the new concrete pavement.
 - o Local access will be provided to intersections, driveways and businesses wherever possible.
- <u>Stage III Construction</u> as shown on the plans, the construction of the proposed southbound parking lane, curb and gutter, and bike path will comprise the Stage III construction Area. During this stage:

- The remainder of the existing pavement will be removed. Construction traffic will utilize the new concrete pavement poured in Stage II.
- o Local access will be provided to intersections, driveways and businesses wherever possible.

Driveways will be maintained for business access throughout the course of the project except during framing, pouring, and curing of concrete. Maintaining driveway access will be paid for as TEMPORARY ACCESS (COMMERCIAL ENTRANCE). All work for temporary staging is included in the cost of TRAFFIC CONTROL AND PROTECTION (SPECIAL).

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	Type	Location	Estimated Duration of Time for the Completion of Relocation or Adjustments
NICOR, Ms. Connie Lane 1844 Ferry Road Naperville, IL 60563 630-388-3830	Gas	East Prkwy: 1+00 to 22+90 West Prkwy: (1+00 to 26+00) Crossing:0+80 and 0+95	Potential conflict at 14 utility crossings. Currently verifying elevations with Nicor. All adjustments will be done by April 1, 2014.
ComEd Mr. Joe Stacho 1 N 423 Swift Road Lombard, IL 60148 630-437-2212	Elec	Overhead and Underground Crossing at 26+05	Potential conflict at stations 26+05 with two utility crossings. All adj will be done by April 1, 2014. Currently verifying elevations with ComEd.

AT &T Mr. Tom Follin 1000 Commerce Drive	Tele	East Pkwy: 1+50 to 12+00 West Pkwy: 0+90 to	Potential conflict at stations 1+50 and 19+40 with four utility crossings. Currently
Oak Brook, IL 60523		19+35	verifying elevations with ATT.
630-573-6462		Crossing: 1+00, 19+40	All adjustments will be done by April 1, 2014.
Comcast		West Pkwy: 0+90 to	Potential conflict at 8 utility
Martha Gieras		18+05	crossings. Currently verifying
Administrative Ast,	Cable	Crossing: 0+90, 11+50,	elevations with Comcast. All
688 Industrial Dr		12+00, 18+05	adjustments will be done by
Elmhurst, Illinois			April 1, 2014.
60126			

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.

OPEN EXCAVATIONS

Leaving of any excavation open overnight will not be allowed on this project. The Contractor will be responsible for completely backfilling or plating over of all excavations at the end of each day. If the excavations are backfilled they shall be filled with an aggregate meeting the gradation of CA-6. The material will be compacted sufficiently to prevent rutting or settlement of material under traffic loads. If plates are used they shall be of sufficient thickness to support vehicular loads. Additionally they shall extend a minimum of nine inches (9") beyond the limits of the excavation on all sides. If the plates are to be left over the weekend, the edges of the plates shall be cushioned with a bituminous mixture in areas where vehicular traffic will cross the plates.

The costs for providing the aggregate, plates and bituminous mixture will not be paid for directly but shall be considered included in the cost of the excavation work required for the various contract items.

CURING AND PROTECTION

After the concrete has been finished and the water sheen has disappeared from the surface of the concrete, the surface shall be sealed with membrane curing compound of a type approved by the Engineer. The seal shall be maintained for the specified curing period. The edges of the concrete shall also be sealed immediately after the forms are removed. In addition, all concrete placed during periods of cold weather shall be protected in accordance with Article 720.13 of the Standard Specifications. This work shall be considered included in the cost of the various concrete items in the Contract.

The work shall be under the charge and care of the Contractor until final acceptance by the Village. The Contractor shall assume all responsibility for any injury or damage to the work from any cause whatsoever and he shall rebuild, repair or restore the damaged work at his own expense.

Basis of Payment: This item will not be paid for separately but will be included in the unit price for the various concrete items in the Contract.

CURB AND GUTTER TRANSITIONS

Transitions from the proposed curb and gutters to the depressed curb and gutters, proposed curb and gutters to existing curb and gutters, and from 6" curb height to 4" curb height (and vice-a-versa) shall be done in ten (10) foot transitions unless directed by the Engineer.

<u>Basis of Payment:</u> This item will not be paid for separately but will be included in the unit price for the various concrete items in the Contract.

AGGREGATE BEDDING FOR CONCRETE WORK

New curb and gutter, along with sidewalk and 7" driveway pavement, shall be placed on a minimum of two inches (2") of compacted CA-6 stone bedding. New 8" driveway pavement shall be placed on a minimum of four inches (4") of compacted CA-6 stone bedding. Additional aggregate required to adjust the existing elevation of the subgrade to the proposed elevation will be included as part of this work.

<u>Basis of Payment:</u> This item will not be paid for separately but will be included in the unit price for the respective concrete items in the contract.

INLET FILTERS

This work shall consist of the furnishing, installation, and removal of a drainage structure inlet filter assembly, consisting of a frame and filter bag, to collect sediment in surface stormwater runoff at locations shown on the plans or as directed by the Engineer be in accordance with Section 280 of the Standard Specifications.

The Contractor shall inspect the work site and review the plans to determine the number and dimensions of the various types of drainage structure frames (circular and rectangular) into which the inlet filters will be installed prior to ordering materials.

The drainage structure inlet filter assembly shall be installed under the grate on the lip of the drainage structure frame with the fabric bag hanging down into the drainage structure.

The drainage structure inlet filter assembly shall remain in place until final removal of the assembly is directed by the Engineer. The drainage structure inlet filter assembly shall remain the property of the Contractor. Final removal of the assembly shall include the disposal of debris or silt that has accumulated in the filter bag at the time of final removal.

Cleaning of the filter bags shall be included in this item. The cleanings shall be performed weekly, or as needed to keep the bags from reaching 75% of their storage capacity, for the duration of the use of each drainage structure inlet filter assembly. The Engineer shall be the sole judge of the need for cleaning, based on the rate that debris and silt is collected at each location. Also included shall be the off-site disposal of the material which is removed from the bags.

A detail drawing in the plans depicts the drainage structure inlet filter assembly.

The drainage structure inlet filter assembly consists of a steel frame with a replaceable geotextile fabric bag attached with a steel band with locking cap that is suspended from the frame. A clean used bag and a used steel frame in good condition meeting the approval of the Engineer may be substituted for new materials.

Basis of Payment: The work will be paid for at the Contract unit price per EACH for INLET FILTERS.

AGGREGATE SUBGRADE IMPROVEMENT (D-1)

Effective: February 22, 2012 Revised: November 1, 2013

Add the following Section to the Standard Specifications:

"SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

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

303.02 Materials. Materials shall be according to the following.

	Item	Article/Section
(a)	Coarse Aggregate	1004
(b)	Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3)	1031

- Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01 or CS 02 but shall not exceed 40 percent of the total product. The top size of the Coarse RAP shall be less than 4 in. (100 mm) and well graded.
- Note 2. RAP having 100 percent passing the 1 1/2 in. (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradations CS 01 or CS 02 are used in lower lifts. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.
- Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- **303.03** Equipment. The vibratory machine shall be according to Article 1101.01, or as approved by the Engineer.
- 303.04 Soil Preparation. The stability of the soil shall be according to the Department's Subgrade Stability Manual for the aggregate thickness specified.
- **303.05** Placing Aggregate. The maximum nominal lift thickness of aggregate gradations CS 01 or CS 02 shall be 24 in. (600 mm).
- 303.06 Capping Aggregate. The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. When Reclaimed Asphalt Pavement (RAP) is used, it shall be crushed and screened where 100 percent is passing the 1 1/2 in. (37.5 mm) sieve and being well graded. RAP that has been fractionated to size will not be permitted for use in capping. Capping aggregate will not be required when the aggregate subgrade improvement is used as a cubic yard pay item for undercut applications. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.
- **303.07 Compaction.** All aggregate lifts shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.
- 303.08 Finishing and Maintenance of Aggregate Subgrade Improvement. The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.
- **303.09 Method of Measurement.** This work will be measured for payment according to Article 311.08.

303.10 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified.

Add the following to Section 1004 of the Standard Specifications:

- " 1004.06 Coarse Aggregate for Aggregate Subgrade Improvement. The aggregate shall be according to Article 1004.01 and the following.
 - (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete.
 - (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.
 - (c) Gradation.
 - (1) The coarse aggregate gradation for total subgrade thicknesses of 12 in. (300 mm) or greater shall be CS 01 or CS 02.

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

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

- (2) The 3 in. (75 mm) capping aggregate shall be gradation CA 6 or CA 10.
- (3) Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

This item will consist of the removal of the existing hot mix asphalt surface necessary to provide the profile of the proposed pavement cross section within the butt joint areas. The depth of grinding shall vary at the centerline and quarter crown of the pavement but shall not exceed four inches (4"). The area within Armitage Avenue will be milled to allow for 1 ½" to 4" of Hot-Mix Asphalt paid for under, HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 and HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50. All other locations shall be milled to allow for two inches (2") of asphalt surface to be placed (paid for as INCIDENTAL HOT-MIX ASPHALT SURFACING).

Although not expected, this item shall include the removal of any concrete base course that is necessary to achieve the required section and the shaping and compacting of any aggregate base that is exposed during grinding operations. Sufficient milling or grinding passes shall be made over the existing pavement so that all irregularities and high spots are eliminated from the pavement's surface before it is overlaid with new material. All butt joints are included under this pay item and shall be saw-cut no more than twenty-four (24) hours prior to the placement of the bituminous surface.

The equipment and construction methods for this item will conform to Article 440.03 of the Standard Specifications for Road and Bridge Construction. Hot-Mix Asphalt Surface Removal shall be measured in place and the area computed in square yards for the total increment of material removed. The area measured shall be paid for only once regardless of the number of passes needed to remove the material.

<u>Basis of Payment:</u> This work will be paid for at the Contract unit price per Square Yard of HOT-MIX ASPHALT SURFACE REMOVAL – BUTT JOINT

INCIDENTAL HOT-MIX ASPHALT SURFACING

This item will be used to pay for the replacement of Hot-Mix Asphalt surface adjacent to the new concrete pavements at North Avenue and Bloomindale Avenue. Additionally, this item will be used within the parkway for any asphalt areas that are designated to be replaced in kind.

For locations within the pavement, the existing asphalt pavement shall be milled to a depth sufficient to allow for two inches (2") of Hot-Mix Asphalt Surface Course.

In parkway areas, where stone base exists, the area to be improved shall be excavated to a depth of 12", with nine inches (9") of compacted aggregate placed in two lifts installed. The areas shall then be surfaced with a three inch (3") thickness of HMA surface course placed in two lifts.

The excavation and milling to reach the required subgrade will **not** be paid for under this item but shall be included in EARTH EXCAVATION and HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT, respectively. The placement of the nine inches (9") of compacted aggregate will be paid for as AGGREGATE BASE COURSE, TYPE B 9".

The material shall meet the requirements of Hot-Mix Asphalt Surface Course, Mix "D", N50, as described in the IDOT Special Provisions and as shown in the paving mix chart on the plans.

All concrete or brick surfaces scheduled for asphalt surfacing shall be cleaned and then primed with RC-70 bituminous material at a rate of 0.05 to 0.10 gallons per square yard immediately prior to the laying of the asphalt mixture. A self-propelled mechanical roller shall be used to compact the HMA surface course.

Basis of Payment: This item shall be at the Contract unit price per Ton for INCIDENTAL HOT-MIX ASPHALT SURFACING.

PCC PAVEMENT FINISH

The PORTLAND CEMENT CONCRETE PAVEMENT 9" (JOINTED) item shall be finished with asymmetric tining.

<u>Basis of Payment</u>: This item shall be included in the cost of PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED), which is otherwise described in Section 420 of the Standard Specifications.

HIGH-EARLY-STRENGTH PORTLAND CEMENT CONCRETE PAVEMENT 8"

This item will be constructed as described in Section 420 of the Standard Specifications. The location of this particular type of pavement will be per plans except as designated by the Engineer. The Engineer reserves the right to alter proposed locations of this item to better facilitate staging during the course of construction.

This item is to be used behind the proposed back of curb and will serve as driveway aprons within the Public ROW.

Basis of Payment: This item shall be included in the cost of HIGH EARLY PORTLAND CEMENT CONCRETE PAVEMENT 8", which is otherwise described in Section 420 of the Standard Specifications.

HIGH-EARLY-STRENGTH PORTLAND CEMENT CONCRETE PAVEMENT 9"

This item will be constructed as described in Section 420 of the Standard Specifications. The location of this particular type of pavement will be per plans except as designated by the Engineer. The Engineer reserves the right to alter proposed locations of this item to better facilitate staging during the course of construction.

This item is to be used within the limits of the proposed pavement for Cornell Avenue.

Basis of Payment: This item shall be included in the cost of HIGH EARLY PORTLAND CEMENT CONCRETE PAVEMENT 8", which is otherwise described in Section 420 of the Standard Specifications.

PROTECTIVE COAT

This item includes the placement of protective coat on all exposed concrete surfaces at locations shown on the plans or as directed by the Engineer. Regardless of when the concrete is poured, a protective coat shall be applied to all concrete curb and gutter, driveways, concrete pavement, and sidewalks in accordance with the requirements of Section 421 of the Standard Specifications.

Two complete applications will need to be made prior to payment being made.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Square Yard of PROTECTIVE COAT.

PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH

This item pertains to the concrete pavement to be utilized as driveways along Cornell Avenue. The concrete pavement shall be constructed in accordance with Section 420 of the "Standard Specifications for Road and Bridge Construction".

The cross sectional detail of this pavement shall be as shown in the details on the Plans.

The surface of the pavement shall have a broom finish applied transversely and be allowed to cure until the concrete has attained a compressive strength of 3,500 psi (or 7 calendar days) before allowing vehicles to travel on the pavement.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Square Yard for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH.

PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

This item includes the placement of new concrete sidewalk at locations shown on the Plans or as directed by the Engineer in accordance with Section 424 of the "Standard Specifications for Road and Bridge Construction". The five inch (5") thick, P.C.C. sidewalk shall be constructed to the limits and grade required to blend with adjoining surfaces.

Full depth (5"), three-quarter inch (%") bituminous expansion joints shall be placed between the sidewalk and the back of any adjacent curb, sidewalk, or buildings, and as directed by the Engineer.

Steel forms will not be allowed on this project.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Square Foot for PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH.

DETECTABLE WARNINGS

This work includes the installation of a detectable warning surface system in all concrete sidewalk ramps in compliance with the Americans with Disabilities Act, Accessibility Guidelines (ADAAG). Work shall be in accordance with IDOT Standard 424001-06 and Section 424 of the Standard Specifications and the details for this item as shown on the Plans. This item shall consist of installing cast-in-place, hollow composite paver tiles with embedment flanges in the freshly poured concrete sidewalk ramp.

These fiberglass paver tiles shall be "brick red" in color and 24" X 60" in size.

The composite paver tile used in this project shall be as manufactured by ADA Solutions, Inc. (www.ADATILE.com) or Armor-Tile or Tuff-Tile. The paver tiles shall be installed according to the manufacturer's installation procedures.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Square Foot for DETECTABLE WARNINGS.

DRIVEWAY PAVEMENT REMOVAL

This work shall be done in accordance with Section 440 of the Standard Specifications with the exception that it will also include the removal of concrete, brick, block, aggregate, flagstone, and bituminous sidewalks, driveway, and alleys. This item will not include any excavation necessary to reach the subgrade for the proposed driveways as this excavation will be paid for under EARTH EXCAVATION (SPECIAL).

These driveways will be excavated to the sub-grade of the proposed driveway (including 2" stone cushion) as shown on the plans or as directed by the Engineer. The Contractor shall be required to saw cut the driveway pavement full-depth at the limits of removal.

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per Square Yard for DRIVEWAY PAVEMENT REMOVAL.

COMBINATION CONCRETE CURB AND GUTTER REMOVAL

This item shall include the removal of defective combination concrete curb and gutter and will include removal of all types of curb, at locations shown on the plans or as directed by the Engineer. All removal shall terminate at existing contraction joints, expansion joints or at saw-cut lines as determined by the Engineer. Also included is the cost to reach the proposed subgrade of proposed curb and gutter (including 2" stone cushion).

Any asphalt surface material overlaid onto the gutter that is to be removed with the concrete curb will be included in the cost of this item.

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per foot of COMBINATION CONCRETE CURB AND GUTTER REMOVAL.

SIDEWALK REMOVAL

This item includes the removal of sidewalk at locations shown on the Plans and as directed by the Engineer in accordance with Section 440 of the "Standard Specifications." The Engineer will mark the limits of removal. The sidewalk shall be saw-cut full-depth and any areas outside the limits of removal which are damaged shall be replaced by the Contractor at his own expense.

The removal of concrete, brick, block, aggregate, flagstone, and bituminous sidewalks will be included in this item. These sidewalks shall be excavated to the subgrade of the proposed five inch (5") concrete sidewalk, including the two inch (2") crushed stone cushion. This item will not include any excavation necessary to reach the subgrade for the proposed driveways as this excavation will be paid for under EARTH EXCAVATION (SPECIAL).

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per Square Foot of SIDEWALK REMOVAL.

STORM SEWERS, RUBBER GASKET

In those locations indicated on the Plans, Reinforced Concrete Pipe (RCP) sewer pipe of the Type, Class, and Diameter indicated shall be installed.

The pipe shall conform to ASTM designation C 76, with C 443 joints. Pipe installation shall be in accordance with Section 31 of the "Standard Specifications for Water and Sewer Main Construction".

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per Foot for STORM SEWERS, RUBBER GASKET, of the Type, Class, and Diameter indicated.

DUCTILE IRON WATER MAIN

This item shall include the installation of Ductile Iron Class 52 water main of the size indicated at the locations shown on the Plans.

The installation of a six (6) mil thick high-density polyethylene tubing will be included in the cost of this item.

Basis of Payment: This item shall be paid for at the Contract unit price per Foot for DUCTILE IRON WATER MAIN, of the Diameter indicated.

WATER VALVES

All gate valves to be installed in this project shall be the Waterous Series 500 Resilient Wedge Gate Valve with mechanical joints of the size indicated.

A 1" corporation tap shall be made into the water main on each side of the valve to allow for testing, chlorinating, and sampling work to be done. The furnishing and installing of these taps shall be included in the work necessary for this item.

All brass corporation taps are to be manufactured in accordance with AWWA C-800 and ASTM B-62 Specifications. The inlet side of corporation assembly is to be machined with AWWA standard threads, while the outlet is to be machined to accept a standard tube nut for attaching flared 1" diameter copper tubing.

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per Foot for WATER VALVES, of the size indicated.

FIRE HYDRANT TO BE REMOVED

This item will consist of removing existing fire hydrants and their auxiliary valves. The six-inch (6") pipe from the water main shall be cut on the water system side of the auxiliary valve and the entire fire hydrant and auxiliary valve assembly shall be removed and delivered to the Village of Melrose Park's Public Works at 1000 N 25th Ave Melrose Park, IL 60160. The Contractor shall seal the six-inch (6") hydrant leader with brick and mortar.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Each for FIRE HYDRANT TO BE REMOVED.

FIRE HYDRANT WITH AUXILIARY VALVE AND BOX

The locations of the proposed fire hydrants as shown on the Plans are approximate and their exact locations shall be determined in the field during construction.

The fire hydrants to be installed under this Contract shall be the Waterous Pacer Model WB67 of the "breakaway" design having a five and one-quarter inch (5-1/4") main valve opening, four inch (4") pumper nozzle, and two (2) two and one-half inch (2-1/2") hose nozzles. The pumper and hose threads shall be National Standard Threads. The inlet connection shall be six inches (6") in size and flanged-type. The depth of bury shall be five feet and six inches (5'-6"), the direction of opening to the left, the size of the operating

nut shall be one and one-half inches (1-1/2"), the hydrant packing of the "O" ring type, and the hydrant shall be painted YELLOW in color. The auxiliary valves shall be the Waterous flange by mechanical-joint resilient wedge gate valve.

The valve box to be furnished and installed under this item shall be 8" in diameter and similar and equal to Mueller Valve Box (H-10360-666) screw type.

Any extenders required to raise or lower hydrant so that it sits at grade level will be included in the cost of this item.

Basis of Payment: This item shall be at the Contract unit price per Each for FIRE HYDRANT WITH AUXILIARY VALVE AND BOX.

PIPE UNDERDRAINS 4" SPECIAL

Two (2), 3-foot sections of perforated, PVC pipe underdrain meeting the material requirements of Article 1040.03 shall be installed in each drainage structure. The underdrain shall be installed as per the details on the plans and shall be laid parallel to the curb and gutter. The under-drain shall drain at a slope of 1.0% (min.) to the existing catch basin. The trench backfill associated with this item shall be not be paid for separately but shall be included in this item.

The underdrain should be wrapped with a geotextile "sock" which will be included in the cost of this item.

This item shall be installed in accordance with Section 601 of the Standard Specifications for Road and Bridge Construction.

Basis of Payment: This work shall be paid for the Contract unit price per Foot for PIPE UNDERDRAINS 4" SPECIAL

CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID

This item consists of the placement of a catch basin, four feet (4') in diameter. This item shall consists of furnishing all work and materials, including the necessary cast iron frames and grates necessary to construct a storm sewer manhole in accordance with Section 602 of the "Standard Specifications". All precast manholes shall conform with ASTM 478 and also to design dimensions. Cones and sections shall be free from fractures and surface roughness, and free from gravel pockets. Construction of this item shall also be according to the details shown on the plans and conforming to the lines, grades, and dimensions shown on the construction plans, including the necessary cored openings for proposed under drains.

The Contractor will be responsible for ensuring that the pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary. A minimum of 2" and a maximum of 6" of adjustment rings will be required.

Butyl rubber gasket compound shall be used to seal the various structure joints.

All trench backfill used to fill around the new structure will be included in the cost of this item.

Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the structure to be installed shall be included in the cost of the structure to be installed.

Restricted depth catch basins will NOT be paid for under this item, but shall be paid for under the item: CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID, SPECIAL.

Basis of Payment: This item will be paid for at the Contract unit price per Each for CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID.

CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID

This item consists of the placement of a Type 'C' catch basin, two feet (2') in diameter. This item shall consists of furnishing all work and materials, including the necessary cast iron frames and grates necessary to construct a storm sewer manhole in accordance with Section 602 of the "Standard Specifications". All precast manholes shall conform with ASTM 478 and also to design dimensions. Cones and sections shall be free from fractures and surface roughness, and free from gravel pockets. Construction of this item shall also be according to the details shown on the plans and conforming to the lines, grades, and dimensions shown on the construction plans.

The Contractor will be responsible for ensuring that the pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary. A minimum of 2" and a maximum of 6" of adjustment rings will be required.

Butyl rubber gasket compound shall be used to seal the various structure joints.

All trench backfill used to fill around the new structure will be included in the cost of this item.

Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the structure to be installed shall be included in the cost of the structure to be installed.

Basis of Payment: This item will be paid for at the Contract unit price per Each for CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID.

MANHOLES, TYPE A, TYPE 1 FRAME, CLOSED LID

This item consists of furnishing all work and materials, including the necessary cast iron frames and grates, necessary to construct a restricted depth manhole of the size indicated, in accordance with Section 602 of the "Standard Specifications", the detail shown on the plans and conforming to the lines, grades, and dimensions shown on the construction plans.

The Contractor will be responsible for ensuring that the pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary. A minimum of 2" and a maximum of 6" of adjustment rings will be required.

Butyl rubber gasket compound shall be used to seal the various structure joints.

All trench backfill used to fill around the new structure will be included in the cost of this item.

Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the structure to be installed shall be included in the cost of the structure to be installed.

<u>Basis of Payment</u>: This work will be paid for at the Contract unit price Each for MANHOLES, TYPE A, TYPE 1 FRAME, CLOSED LID, of the size indicated.

VALVE VAULTS, TYPE A, TYPE 1 FRAME, CLOSED LID

Where indicated on the Plans, a four-foot (4') or five-foot (5') diameter, precast, reinforced concrete valve vault is to be installed over the water main pressure cut-ins. The valve vault shall be manufactured in compliance with the latest issue of ASTM C-478. Eccentric cone sections shall be installed as indicated. Precast concrete adjusting rings shall be used where necessary. "Knockouts" shall be cast into the lower barrel section to allow the water mains to pass through the vault. The opening shall be large enough so no part of the barrel section rests directly on the water mains or fittings. The void between the pipe and barrel shall be closed in with cement brick and mortar, and a coat of mortar one-half inch (1/2") thick applied on the inside and outside of the vault.

Basis of Payment: This work will be paid for at the Contract unit price Each for VALVE VAULTS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID, of the size indicated.

MANHOLES TO BE ADJUSTED

Structures which lie in the PCC pavement must be adjusted to final grade and prepared with "roundouts" in accordance with Standard 420111-03 prior to the construction of the pavement.

Structures, which are located in the curb and gutter, shall not be adjusted to final grade until the curb and gutter has been placed to within five feet (5') of each side of the structure. At this time the Contractor may adjust the structure to the proper elevation to achieve drainage of the curb and gutter.

Frames located in the curb and gutter shall be pitched 1-1/2". Frames located in the pavement shall be pitched to match the cross slope of the pavement. The Contractor may use solid pieces of concrete or brick as shims to pitch the frame. The use of rocks to adjust the frames will not be permitted. The shims must also be placed in a bed of mortar at the time of the adjustment. The Contractor will not be allowed to shim the frame and then come back later to mortar the voids between the frame and the structure.

The Contractor shall take care when setting the structure so as to insure that a nine inch (9") frame and the minimum 2" of grade rings can be placed on top of the uppermost precast section of the structure in order to reach the finished grade.

The Contractor shall place mastic rope between concrete rings and between the rings and frame. The Contractor shall also apply a one-quarter inch (1/4") layer of butyl rubber gasket sealant to the external diameter of the concrete grade adjustment rings.

Frames located in the curb and gutter shall be pitched 1-1/2". Frames located in the pavement shall be pitched to match the cross slope of the pavement.

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per Each for MANHOLES TO BE ADJUSTED.

STRUCTURES TO BE RECONSTRUCTED

This item shall consist of the reconstruction of existing manholes or valve vaults at locations shown on the plans or as directed by the Engineer. The reconstruction shall be in accordance with Section 602 of the "Standard Specifications and shall not disturb the existing bench but shall be concentrated upon the reconstruction of all defective barrel, cone, and adjustment sections. The Engineer shall mark the depth to which the structure shall be reconstructed prior to the beginning of the work on the structure.

Structures to be reconstructed which lie in the PCC pavement must be adjusted to final grade and prepared with "roundouts" in accordance with Standard 420111-03 prior to the construction of the pavement. No additional payment will be made for this "adjustment" as this work will be paid for under the reconstruct item.

Only precast concrete barrel, cone, flattop, and adjustment ring sections shall be used to replace defective sections of the structure. It shall be the Contractor's responsibility to determine the size of the existing structure. No additional payment shall be made for the various sizes of structures encountered. Any manholes, catch basins, or valve vaults that are reconstructed shall have all debris removed from the bench regardless of whether it resulted from the construction project.

All precast cone sections will have a flat surface on the bottom edge that rests on the remaining portion of the existing structure.

Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the structure to be installed shall be included in the cost of the structure to be installed. All trench backfill used to fill around the new structure will be included in the cost of this item.

Basis of Payment: This item shall be paid for at the Contract unit price per Each for MANHOLES TO BE RECONSTRUCTED or VALVE VAULTS TO BE RECONSTRUCTED.

FRAMES AND LIDS, TYPE I

All sewer closed lids shall be provided according to Section 604 of the "Standard Specifications" and shall be self-sealing with recessed pick holes. All frames with closed lids to be furnished as part of this contract for construction, adjustment, or reconstruction of any manhole or valve vault shall have east into the lid one of the following words:

	Neenah Foundry	Self	Word Cast
Structure Type	Frame and Lid	Sealing	Into Lid
Sanitary Manhole	R-1713-B	YES	SANITARY
Combination Manhole	R-1713-B	YES	SANITARY
Storm Manhole	R-1713-B	NO	STORM
Valve Vault	R-1713-B	YES	WATER
Catch Basin	R-2504-D	NO	
Inlet	R-2504-D	NO .	

<u>Basis of Payment</u>: The frame and lid shall be included in the unit price of any new structure placed as part of the project. In the case of an existing structure that is to be adjusted or reconstructed the frame and lid shall be paid for at the Contract unit price per Each for FRAMES AND LIDS, TYPE 1, CLOSED LID.

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MODIFIED)

The construction of the combination concrete curb and gutter shall be in accordance with Section 606 of the Standard Specifications and the details for this item as shown on the Plans.

The proposed gutter flag shall have a minimum thickness of ten inches (10") and shall be placed on a 2" stone cushion (included in the cost of this item). The height of the <u>curb head shall vary</u> with the grades shown on the Plans or as directed by the Engineer. If the Contractor fails to properly cut the joints in the specified time period and the curb cracks, the entire curb section will be replaced from the nearest adjacent tooled joint.

After removal of the "back of curb" form, the excavated area behind the curb designated for sodding shall be immediately backfilled with select non-organic earth backfill in preparation for the placement of the topsoil. All areas where concrete or asphalt pavement is to be constructed shall be backfilled with crushed stone, gradation CA-7 and properly compacted. This stone must be compacted prior to framing the proposed sidewalk or driveway. The placement of the required backfill material shall be considered included in the cost of the placement of the curb and gutter.

Masonite and steel forms will not be allowed.

Included in this item is furnishing and placing the crushed stone cushion under the proposed concrete, expansion joints, dowel bars, forming, concrete needed to construct the curb and gutter, backfilling the curb and gutter, and all labor, material, and equipment necessary to construct this item.

Basis of Payment: This item shall be paid for at the Contract unit price per foot of COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MODIFIED).

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

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 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 offsite 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 assessment (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 assessment (PESA) site number) for special or hazardous waste disposal, and
 - (f) Landfill tickets (identified by the preliminary environmental site assessment (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."

Qualifications. The term environmental firm shall mean an environmental firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is pre-qualified in hazardous waste

by the Department. Documentation includes but not limited to verifying remediation and special waste operations for sites contaminated with gasoline, diesel, or waste oil in accordance with all Federal, State, or local regulatory requirements and shall be provided to the Engineer for approval. The environmental firm selected shall not be a former or current consultant or have any ties with any of the properties contained within and/or adjacent to this construction project.

<u>General</u>. This Special Provision will likely require the Contractor to subcontract for the execution of certain activities.

All contaminated materials shall be managed as either "uncontaminated soil" or non-special waste. This work shall include monitoring and potential sampling, analytical testing, and management of a material contaminated by regulated substances. The Environmental Firm shall continuously monitor all soil excavation for worker protection and soil contamination. Phase I Preliminary Engineering information is available through the District's Environmental Studies Unit. Soil samples or analysis without the approval of the Engineer will be at no additional cost to the Department. The lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit whichever is less.

The Contractor shall manage any excavated soils and sediment within the following state Right-of-Way areas:

- Station 0+49 to Station 1+00 0 to 57 feet LT (Navistar, PESA Site 2295-8, 10400 West North Avenue). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)Pyrene, Lead, and Manganese.
- Station 0+49 to Station 1+00 0 to 61 feet RT (Edgewater Products Company, PESA Site 2295-14, 3315 West North Avenue). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)Anthracene, Benzo(a)Pyrene, Dibenzo(a,h)Anthracene, Lead, and Manganese.

Additionally, according to soil borings taken in early 2013, concentrations of arsenic exceeded the ingestion and soil component of the groundwater ingestion exposure route SROs at one boring location (Boring SP 5). The source of the arsenic could not be definitively identified due to the lack of other identifier contaminants in soil. Due to the limited information collected in this identified area of impact, additional samples were collected within the vicinity of SB 5 to further delineate soils containing elevated arsenic concentrations. This additional sampling was intended to confirm the limits of material that are unacceptable at a Clean Construction or Demolition Debris (CCDD) or uncontaminated fill operation in accordance with 35 IAC 1100.

On April 25, 2013, an environmental consultant returned to the project area to install additional borings in the vicinity of boring SP 5. Three sets of borings, one set comprised of one boring placed to the north and one boring placed to the south equidistant from SP 5, were placed at 25 foot intervals from SP 5. Soil samples were collected from each of the borings at a similar depth at which the arsenic exceedence

was noted in SP 5. The samples were then submitted to Prairie Analytical Systems, Inc. (Prairie) for analysis of arsenic. The concentrations of these samples were determined to be below the most stringent 35 IAC 742 Residential Soil Remediation Objective (SRO) of 13 parts per million (ppm) and therefore the arsenic impact within the project area was defined. Based on the low concentrations of arsenic within this first interval, collected 25 feet to the north and south of SP 5, no additional evaluation of the other soil sample intervals was required to delineate arsenic impact within the project area. Based on the findings of this additional arsenic assessment, the area of arsenic impact has been delineated. In the event that soil from the identified area requires off-site management, this soil shall be required to be handled and disposed as a non-hazardous special or non-special waste.

As a result of this information, the excavation of the existing roadway area designated on the plans within Village Right-of-Way, is NOT included in the quantity for EARTH EXCAVATION (SPECIAL), but is included in the pay item, NON-SPECIAL WASTE DISPOSAL. If during construction it is found that the existing dump is accepting the excavated material, new calculations will be computed for this item.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Cubic Yard of NON-SPECIAL WASTE DISPOSAL which shall include the excavation and removal of all Non-Special Waster within these project limits.

RELOCATE EXISTING LIGHTING UNIT

This item shall done in accordance with Section 844 of the Standard Specifications except as herein modified:

The existing lighting units are fed through an overhead wire from pole to pole. This item shall include the removal and disposal of the existing overhead wires and associated hardware and plugging of an existing openings in the light pole.

The existing units do not have pole wires and connectors. This work shall also include the furnishing and installation of new pole wires to connect the existing luminaires to the new underground wiring system in accordance with Article 1066.09.

Fuseholders and Fuses shall be furnished and installed in accordance with Article 1065.01

Basis of Payment: This work shall be paid for at the contract unit price per each for RELOCATE EXSITING LIGHTING UNIT.

TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING, & PATCHING OPERATIONS (D1)

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

The following Traffic Signal Special Provisions and the "District 1 Standard Traffic Signal Design Details" supplement the requirements of the State of Illinois "Standard Specifications for Road and Bridge Construction."

The intent of this Special Provision is to prescribe the materials and construction methods commonly used to replace traffic signal detector loops and replace magnetic signal detectors with detector loops during roadway resurfacing, grinding and patching operations. Loop detector replacement will not require the transfer of traffic signal maintenance from the District Electrical Maintenance Contractor to this contract's electrical contractor. Replacement of magnetic detector will require wiring revisions inside the control cabinet and therefore the transfer of maintenance will be required. All material furnished shall be new. The locations and the details of all installations shall be as indicated on the Plans or as directed by the Engineer.

The work to be provided under this contract consists of furnishing and installing all traffic signal work as specified on the Plans and as specified herein in a manner acceptable and approved by the Engineer.

NOTIFICATION OF INTENT TO WORK. Contracts such as pavement grinding or patching which result in the destruction of traffic signal detection require a notification of intent to work and an inspection. A minimum of seven (7) working days prior to the detection removal, the Contractor shall notify the:

- Traffic Signal Maintenance and Operations Engineer at (847)705-4424
- IDOT Electrical Maintenance Contractor at (773) 287-7600

at which time arrangements will be made to adjust the traffic controller timing to compensate for the absence of detection.

Failure to provide proper notification may require the District's Electrical Maintenance Contractor to be called to investigate complaints of inadequate traffic signal timing. All costs associated with these expenses will be paid for by the Contractor at no additional expense to the Department according to Section 109 of the "Standard Specifications."

ACCEPTANCE OF MATERIAL.

The Contractor shall provide:

- 1. All material approval requests shall be submitted a minimum of seven (7) days prior to the delivery of equipment to the job site, or within 30 consecutive calendar days after the contract is awarded, or within 15 consecutive calendar days after the preconstruction meeting, whichever is first.
- 2. Seven (7) copies of a letter listing the manufacturer's name and model numbers of the proposed equipment shall be supplied. The letter will be reviewed by the Traffic Design Engineer to determine whether the equipment to be used is approved. The letters will be stamped as approved or not approved accordingly and returned to the Contractor.
- 3. One (1) copy of material catalog cuts.
- 4. The contract number, permit number or intersection location must be on each sheet of the letter and material catalog cuts as required in items 2 and 3.

INSPECTION OF CONSTRUCTION.

When the road is open to traffic, except as otherwise provided in Section 801 and 850 of the Standard Specifications, the Contractor may request a turn-on and inspection of the completed traffic signal installation at each separate location. This request must be made to the Traffic Signal Maintenance and Operations Engineer at (847)705-4424 a minimum of seven (7) working days prior to the time of the requested inspection.

Acceptance of the traffic signal equipment by the Department shall be based upon inspection results at the traffic signal "turn on." If approved, traffic signal acceptance shall be verbal at the "turn on" inspection followed by written correspondence from the Engineer. If this work is not completed in time, the Department reserves the right to have the work completed by others at the Contractor's expense.

All cost of work and materials required to comply with the above requirements shall be included in the pay item bid prices, under which the subject materials and signal equipment are paid, and no additional compensation will be allowed. Materials and signal equipment not complying with the above requirements will be subject to removal and disposal at the Contractor's expense.

<u>RESTORATION OF WORK AREA</u>. Restoration of the traffic signal work area shall be incidental to the related pay item such as foundation, conduit, hand hole, trench and backfill, etc., and no extra compensation shall be allowed. All roadway surfaces such as shoulders, medians, sidewalks, pavement, etc. shall be replaced as shown in the plans or in kind. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded.

REMOVAL, DISPOSAL AND SALVAGE OF EXISTING TRAFFIC SIGNAL EQUIPMENT. This item shall be incidental to this contract. All material and equipment removed shall become the property of the Contractor and disposed of by the Contractor outside the State's right-of-way. No additional compensation shall be provided to the Contractor for removal, disposal or salvage expense for the work in this contract.

<u>DETECTOR LOOP REPLACEMENT</u>. This work shall consist of replacing existing detector loops which are destroyed during grinding, resurfacing, or patching operations.

If damage to the detector loop is unavoidable, replacement of the existing detection system will be necessary. This work shall be completed by an approved Electrical Contractor as directed by the Engineer.

Replacement of the loops shall be accomplished in the following manner: The Engineer shall mark the location of the replacement loops. The Traffic Signal Maintenance and Operations Engineer shall be called to approve loop locations prior to the cutting of the pavement. The Contractor may reuse the existing conduit (duct) located between the existing handhole and the pavement if it hasn't been damaged. All burrs shall be removed from the edges of the existing conduit which may cause damage to the new detector loop during installation. If the existing conduit is damaged beyond repair, or if it cannot be located, or if additional conduits are required to provide one lead-in duct for each proposed loop; the Contractor shall be required to drill through the existing pavement into the appropriate handhole, and install 25 mm (1") unit duct conduit. This work and the required materials shall not be paid for separately but shall be included in the pay item Detector Loop Replacement. Upon

establishment of the duct, the loop may be cut, installed, sealed and spliced to the twisted-shielded controller cable in the handhole.

Detector loop measurements shall include the saw-cut and the length of the loop lead-in leading to the edge of pavement. Unit duct, splicing, trench and backfill, and drilling of pavement or handholes shall be incidental to detector loop quantities.

All loops installed in new asphalt pavement shall be installed in the binder course and not in the surface course. The edge of pavement or the curb shall be cut with a 6.3 mm (1/4") deep x 100 mm (4") saw-cut to mark location of each loop lead-in.

A minimum of seven (7) working days prior to the Contractor cutting loops, the Contractor shall have the proposed loop locations marked and contact the Traffic Signal Maintenance and Operations Engineer (847)705-4424 to inspect and approve the layout.

Loop detectors shall be installed according to the requirements of the "District 1 Standard Traffic Signal Design Details." Saw-cuts from the loop to the edge of pavement shall be made perpendicular to the edge of pavement when possible in order to minimize the length of the saw-cut unless directed otherwise by the Engineer or as shown on the plan.

The detector loop cable insulation shall be labeled with the cable specifications.

Each loop detector lead-in wire shall be labeled in the handhole using a Panduit 250W175C water proof tag or approved equal secured to each wire with nylon ties. The lead-in wire, including all necessary connections for proper operation, from the edge of pavement to the handhole, shall be incidental to the price of the detector loop.

Loop sealant shall be a two-component thixotropic chemically cured polyurethane either Chemque Q-Seal 295, Percol Elastic Cement A/C Grade or an approved equal. The sealant shall be installed 3 mm (1/8") below the pavement surface, if installed above the surface the overlap shall be removed immediately.

Round loop(s) 1.8 m (six foot) diameter may be substituted for 1.8 m (six foot) by 1.8 m (six foot) square loop(s) and shall be paid for as 7.2 m (24 feet) of detector loop.

Resistance to ground shall be a minimum of 100 megohms under any conditions of weather or moisture.

Heat shrink splices shall be used according to the "District 1 Standard Traffic Signal Design Details."

Drilling handholes, sawing the pavement, furnishing and installing unit-duct to the appropriate handhole, cable splicing to provide a fully operable detector loop, testing and all trench and backfill shall be included in this item.

Detector loop replacement shall be measured along the sawed slot in the pavement containing the loop and lead-in, rather than the actual length of the wire in the slot.

<u>Basis of Payment.</u> Detector Loop Replacement shall be paid for at the contract unit price per foot (meter) of DETECTOR LOOP REPLACEMENT.

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

Revise Articles 850.02 and 850.03 of the Standard Specifications to read:

Procedure.

The energy charges for the operation of the traffic signal installation shall be paid for by others. Full maintenance responsibility shall start as soon as the Contractor begins any physical work on the Contract or any portion thereof.

The Contractor shall have electricians with IMSA Level II certification on staff to provide signal maintenance.

This item shall include maintenance of all traffic signal equipment at the intersection, including emergency vehicle pre-emption equipment, master controllers, uninterruptible power supply (UPS and batteries), telephone service installations, communication cables, conduits to adjacent intersections, and other traffic signal equipment, but shall not include Automatic Traffic Enforcement equipment, such as Red Light Enforcement cameras, detectors, or peripheral equipment, not owned by the State.

Maintenance.

The maintenance shall be according to MAINTENANCE AND RESPONSIBILITY in Division 800 of these specifications and the following:

The Contractor shall check all controllers every two (2) weeks, which will include visually inspecting all timing intervals, relays, detectors, and pre-emption equipment to ensure that they are functioning properly. This item includes, as routine maintenance, all portions of emergency vehicle pre-emption equipment. The Contractor shall maintain in stock at all times a sufficient amount of materials and equipment to provide effective temporary and permanent repairs.

The Contractor shall provide immediate corrective action when any part or parts of the system fail to function properly. Two far side heads facing each approach shall be considered the minimum acceptable signal operation pending permanent repairs. When repairs at a signalized intersection require that the controller be disconnected or otherwise removed from normal operation, and power is available, the Contractor shall place the traffic signal installation on flashing operation. The signals shall flash RED for all directions unless a different indication has been specified by the Engineer. The Contractor shall be required to place stop signs (R1-1-36) at each approach of the intersection as a temporary means of regulating traffic. When the signals operate in flash, the Contractor shall furnish and equip all their vehicles assigned to the maintenance of traffic signal installations with a sufficient number of stop signs as specified herein. The Contractor shall maintain a sufficient number of spare stop signs in stock at all times to replace stop signs which may be damaged or stolen.

The Contractor shall provide the Engineer with a 24 hour telephone number for the maintenance of the traffic signal installation and for emergency calls by the Engineer.

Traffic signal equipment which is lost or not returned to the Department for any reason shall be replaced with new equipment meeting the requirements of the Standard Specifications and these special provisions.

The Contractor shall respond to all emergency calls from the Department or others within one hour after notification and provide immediate corrective action. When equipment has been damaged or becomes faulty beyond repair, the Contractor shall replace it with new and identical equipment. The cost of furnishing and installing the replaced equipment shall be borne by the Contractor at no additional charge to the contract. The Contractor may institute action to recover damages from a responsible third party. If at any time the Contractor fails to perform all work as specified herein to keep the traffic signal installation in proper operating condition or if the Engineer cannot contact the Contractor's designated personnel, the Engineer shall have the State's Electrical Maintenance Contractor perform the maintenance work required. The State's Electrical Maintenance Contractor shall bill the Contractor for the total cost of the work. The Contractor shall pay this bill within thirty (30) days of the date of receipt of the invoice or the cost of such work will be deducted from the amount due the Contractor. The Contractor shall allow the Electrical Maintenance Contractor to make reviews of the Existing Traffic Signal Installation that has been transferred to the Contractor for Maintenance.

TEMPORARY DRAINAGE CONNECTION

This work will include the temporary connection of the existing storm sewer laterals from the existing drainage structures located along the west side of the roadway to the proposed manholes along the centerline of the proposed Cornell Avenue Pavement during Stage I of construction. These connections will utilize cored connection within proposed manholes, tees, or wyes, in the mainline sewer.

In some instances, the cored opening in the proposed manholes are solely for the temporary drainage connections. In these cases, after the removal of the temporary drainage connection, the cored opening in the proposed manhole must be sealed with brick and mortar. This sealing and the removal of the temporary pipe connection will be included in the cost of this item, as will be the digging and exposing of the installed tee or wye and plugging of the item will two feet of non-shrink concrete.

Basis of Payment: This item shall be at the Contract unit price per Each for TEMPORARY DRAINAGE CONNECTION.

PROPOSED STORM SEWER CONNECTION TO EXISTING STORM SEWER

This item shall consist of connecting the proposed 12" storm sewer with the existing 21" storm sewer at the intersection of Cornell Avenue and North Avenue. A section of the 21" pipe will need to be replaced to facilitate the use of a 21" x 12" tee or wye.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Each for PROPOSED STORM SEWER CONNECTION TO EXISTING STORM SEWER.

LANDSCAPING GRAVEL

This item will include furnishing and placing a decorative, Pea Gravel (IDOT # CA-16) along the back of walk in locations as shown on plans or as directed by the Engineer.

The pea gravel should be washed and screened with a mixture of small particles of river rock, with sizes range from 1/8" to 3/8". The gravel should be light in color, a blend of beige, tan, white, gray, with hints of black and red stones. The pea gravel should be installed to a minimum depth of 3" and should be placed over a weed barrier fabric, which will be included in the cost of this item.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Square Yard for LANDSCAPING GRAVEL

FILLING EXISTING VAULT

This item shall consist of the abandonment of valve vaults at locations shown on the plans or as directed by the Engineer. The structure shall be removed to the bottom of existing cone structure, but a minimum of twelve inches (12") below grade and all debris and water shall be removed from the structure. The remainder of the structure shall be filled with compacted trench backfill. A steel plate shall be placed over the top of the structure after it has been backfilled. It shall also be the responsibility of the contractor to seal with brick and mortar all pipes at both ends that connect to these structures.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Each for FILLING EXISTING VAULT.

GROUND STABILIZATION GEOSYNTHETIC

This item shall consist of installing a geo-grid material on the subgrade for the proposed pavements to be reconstructed as part of this Project. The fabric shall be installed in accordance with Section 210 of the "Standard Specifications for Road and Bridge Construction", except for the Materials section article 210.02 and the following:

The geogrid shall be composed of a single layer and integrally formed with triangular apertures and high-profile ribs exhibiting significant dimensional stability through all ribs and junctions of the geogrid structure. The geogrid shall maintain its reinforcement and aggregate confinement capabilities under repeated dynamic loads while in service. The geogrid shall also be resistant to ultraviolet degradation, damage under normal construction practices and all forms of biological and chemical degradation normally encountered in road construction. Geogrid layers shall be placed as directed by the Engineer. The geogrid shall be integrally formed through punching and drawing of extruded sheets of polypropylene. The geogrid shall be oriented in three substantially equilateral directions so the resulting

ribs have a high degree of molecular orientation which continues at least in part through the mass of the integral node.

The resulting geogrid structure shall have apertures that are triangular in shape, and shall have ribs with depth-to-width ratios greater than 1.0. The geogrid shall have typical characteristics shown in the table below, and shall be certified in writing by the manufacturer to meet these characteristics.

Properties	Longitudinal	Diagonal	Transverse	General	
Rib Pitch (2), mm (in)	40 (1.60)	40 (1.60)			
Mid-rib depth (2), mm (in)	-	1.2 (0.05)	1.2 (0.05)		
Mid-rib width (2), mm (in)	-	1.0 (0.04)	1.1 (0.04)		
Nodal thickness (2), mm (in)				3.1 (0.12)	
Rib shape				rectangular	
Aperture shape				triangular	
Junction Efficiency (3), %				93	
Aperture stability (4), kg-cm/deg @ 5.0				3.0	
kg-cm				3.0	
Radial stiffness at low strain (5), kN/m @ 0.5% strain (lb/ft @ 0.5% strain)				225 (15,430)	
Resistance to chemical degradation (6)				100%	
Resistance to ultra-violet light and weathering (7)				100%	

- 1. Unless indicated otherwise, values shown are minimum average roll values (MARVs) determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Load transfer capability determined in accordance with GRI-GG2-87 and GRI-GG1-87 and expressed as a percentage of ultimate tensile strength.
- 4. In-plane torsional rigidity measured by applying a moment to the central junction of a 225mm x 225mm specimen restrained at its perimeter in accordance with U.S. Army Corps of Engineers Methodology for measurement of Torsional Rigidity, (Kinney, T.C. Aperture stability Modulus ref 3,3.1.2000).
- 5. Radial stiffness is determined from minimum tensile stiffness measured in any in-plane direction including but not limited to a minimum 30 degree offset from any continuous rib of the geogrid from testing in accordance with ASTM D6637-01.
- 6. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.

7. Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.

A minimum loose aggregate thickness of 6 inches is required prior to operation of tracked vehicles over the geogrid. Turning of tracked vehicles should be kept to a minimum to prevent tracks from displacing the aggregate base material and damaging the geogrid. When underlying subgrade is trafficable with minimal rutting, rubber-tired equipment may pass directly over the geogrid reinforcement at slow speeds (less than 5 mph). Sudden braking and sharp turning movements shall be avoided.

A. Inspection and Repair

- (1) The Engineer will randomly inspect geogrid before, during and after (using test pits) installation.
- (2) Any damaged or defective geogrid (i.e. frayed coating, separated junctions, separated layers, tears, etc.) will be repaired by removal of affected area and patching using new material with a minimum 3 foot overlap beyond the limits of the affected area.
- (3) Any roll of geogrid damaged before, during and after installation shall be replaced by the Contractor at no additional cost to the Owner.

This work will be measured and paid for by the square yard, completed in place. No allowance will be made for overlap, splices or material cut off or wasted. Payment for GROUND STABILIZATION GEOSYNTHETIC will include furnishing the material, labor, and equipment required to furnish, place and anchor the geogrid, and any hand work necessary to establish grades, make geogrid splices, and repairs to protective coatings. The fabric shall be overlapped one-foot at all seams. The item will be measured with a width no greater than edge of payement to edge of payement.

<u>Basis of Payment</u> This item shall be at the Contract unit price per Square Yard for GROUND STABILIZATION GEOSYNTHETIC.

RAILROAD RIGHT-OF-WAY ENTRY PERMIT

This item shall include all costs associated with the Contractor's acquisition of the Indiana Harbor Belt's (IHB) Right of Entry Agreement and application and the adhering to all railroad requirements. The form must be executed by the Contractor and submitted prior to construction.

The Contractor must satisfy the railroad's requirements for flaggers as described in the attached ROE agreement and will be compensated according to Article 109.05 of the Standard Specifications.

<u>Basis of Payment</u> This item shall be at the Contract unit price per Each for RAILROAD RIGHT-OF-WAY ENTRY PERMIT.

CASING PIPE, OPEN CUT, 24" STEEL

This item shall include the installation of twenty-four-inch (24") casing at the locations shown on the Plans. The casing shall be a single length of steel casing material with NO joints.

The existing IHB railroad tracks will remain in place during the installation of this item. Care will need to be taken when installing the pipes through the trench under the tracks to not damage the existing rails.

Casing spacer will be included in this item and shall be a two-piece shell per carrier pipe and made from T-304 stainless steel of a minimum 14 gauge thickness. Each shell section shall be lined with a 0.090" thick, ribbed PVC extrusion with a retaining section that overlaps the edges of the shell and prevents slippage. Bearing surfaces (runners) shall be ultra high molecular weight polyethylene (UHMW) to provide abrasion resistance and a low coefficient of friction (0.12). The runners shall be attached to support structures (risers) at appropriate positions to properly support the carrier pipe within the casing pipe and to ease installation. The runners shall be mechanically bolted to the riser. The bolt heads are welded to the inside of the risers for strength. Risers shall be made of T-304 stainless steel of a maximum 10 gauge. All risers shall be MIG welded to the shell. Bottom risers 6" and over in height shall be reinforced. All reinforcing plates shall be 10 ga. T-304 stainless steel and shall be MIG welded to mating parts.

Standard positioning within the casing pipe shall be sized such that the carrier rests near the bottom of the casing pipe and the height of the risers and runners are to provide a bottom clearance not less than one-half inch between the casing pipe and the extreme outside diameter of the joint (bell, seam weld). Due to the numerous application possibilities, consult factory for spacing requirements.

Both ends of the casing pipe shall be sealed after the carrier pipe has been installed. Casing spacer end seals shall be a pull-over type construction and made from Neoprene with T-304 stainless steel bands for securing the ends of the end seal to the casing pipe and carrier pipe.

Work related to this item but paid for under the respective Water Main pipe item installed within the casing are the ductile iron water main, the excavating of the pavement, disposing or replacing of the excavated materials, furnishing and placing the bedding materials within which the pipe is to be enveloped, and properly compacting the materials placed into the trench after the casing has been installed.

The bedding materials shall be Coarse Aggregate (crushed stone), CA-11, or CA-13, having a minimum thickness of 4" below the pipe and enveloping the pipe to a height of 12" above the pipe. These items shall be incidental to the cost of the related Water Main pay item.

Work related to this item and included in the cost of the item are required restraints for all water main joints within the casing pipe, casing spacers, sealing the ends of the casing around the water main pipe, and welding the casing joints to water-tight condition.

Basis of Payment This item shall be at the Contract unit price per Foot for CASING PIPE, OPEN CUT, 24" STEEL.

RAILROAD CROSSING

As part of this Contract work will be completed along and within a spur track of the IHB Railroad. The Contractor will be required to install pre-cast concrete crossing for the width of the improvements. The panels must be steel-framed, steel-reinforced concrete panels which are designed to handle heavy truck traffic. The virgin rubber panels must cushion load, control surface water, and provide electrical insulation. They must be broom finished to provide high friction for excellent traction.

The product must meet the following specifications:

- Panel Lengths: 8-10
- Gauge Panel Wifth: 43.5 inches
- Concrete Compressive Strength: 6000 PSI
- Rebar: ASTM A615 Gr. 60 (Tied) ASTM A706 Gr. 60 (Welded)
- Steel Angle: A36
- Rubber Railseal: Vigin SBR, Hardness = 65 +- 5 Durometer Shore A

The finished product must be approved by the Engineer and deemed acceptable by the Indiana Harbor Belt RR prior to final acceptance.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Lump Sum for RAILROAD CROSSING.

EARTH EXCAVATION (SPECIAL)

This item includes all the excavating and grading work necessary on this Project to establish the subgrade elevations of the proposed pavement on Cornell Avenue, other than that excavation required as part of the item for SIDEWALK REMOVAL, DRIVEWAY REMOVAL, COMBINATION CURB AND GUTTER REMOVAL and NON-SPECIAL WASTE DISPOSAL.

The removal and disposal of all brush, rock, construction debris, hedges, trees of sizes less than 6" in diameter, and other excess materials located within the roadway construction area of the Project's improvements shall be considered incidental to the item.

If agreement is not reached, and for portions of work performed that differ from the Plans, quantities will be computed by the following methods. Excavation for the pavement will be computed by the method of average end areas. Original ground elevations used in the calculations shall be those shown on the Plans, or as corrected or interpolated by the Engineer as necessary. The subgrade elevations used in the calculations will be as determined from Plan grades, including any revisions to Plan grades as made or approved by the

Engineer. End areas will be at FIFTY (50) foot intervals. The width calculation of each end area will equal the pavement width.

EARTH EXCAVATION (SPECIAL) quantities are shown in the Summary of Quantities and have been calculated using the cross-sections included in the project plans. These cross-sections used an assumed depth of 5" for existing sidewalks and driveways. This 5" of material is not paid for under this item, but has been included in the respective removal items.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Cubic Yard for EARTH EXCAVATION (SPECIAL).

TRENCH BACKFILL, SPECIAL

All trench backfill used shall be Crushed Stone, Gradation CA-6. Maximum compaction must be obtained by Method 1 (compaction in lifts no greater than 8") as described in Article 550.07 of the "Standard Specifications for Road and Bridge Construction".

The crushed stone used for trench backfill must be approved on the Project by the Engineer.

Payment for this item will be based on actual in-place measurements taken by the Engineer on the site but in no case will exceed the theoretical volume calculated by using the trench backfill detail included in the details shown on the Plans.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Cubic Yard of TRENCH BACKFILL, SPECIAL.

TOPSOIL FURNISH AND PLACE, 4" (SPECIAL)

The Contractor shall take precautions so as not to unnecessarily damage lawns. In areas that are designated to be sodded, the existing sod shall be cut and removed; the area shall then be excavated to a depth of four inches (4") on a straight-line grade from face of sidewalk to back of curb, shaped, graded and rototilled. The areas of excavation adjacent to new concrete shall be compacted to the satisfaction of the Engineer. The area to be sodded shall then have a layer of good quality, pulverized topsoil which has been approved by the Engineer prior to placement, spread and fine raked in such a manner as to result in a top dressing of the parkway having an average thickness of four inches (4") of topsoil.

The Contractor shall be responsible for removing any weeds prior to the placement of the sod. The method of weed removal must be approved by the Engineer.

The topsoil and subgrade shall be thoroughly compacted along newly installed concrete by a compaction method approved by the Engineer. If proper compaction is not achieved, the Engineer may direct the Contractor to remove any soil backfill that the Contractor has placed and replace it with a granular stone backfill. This will be included in the cost of this item.

<u>Basis of Payment</u>: This item shall be at the Contract unit price per Square Yard for TOPSOIL FURNISH AND PLACE, 4" (SPECIAL).

EXPLORATION TRENCH, SPECIAL

This work shall be in accordance to Section 213 of the Standard Specifications for Road and Bridge Construction except that this item will be used to pay for exposing or determining the presence of any existing utility and constructing a trench for the purpose of locating existing utilities within the limits of the proposed improvement. The exploration trench shall be constructed at locations shown on the plans or as directed by the Engineer.

<u>Basis of Payment</u>: The work will be paid for at the Contract unit price per Foot for EXPLORATION TRENCH, SPECIAL.

TEMPORARY ACCESS (COMMERCIAL ENTRANCE)

The contractor shall construct and maintain aggregate surface course for temporary access to driveway entrances according to Article 402.07 and as directed by the Engineer.

The aggregate surface course shall be constructed to the dimensions and grades as follows, except as modified by the plans or as directed by the Engineer. The minimum width shall be 20 feet. The minimum compacted thickness shall be 6". The maximum grade shall be eight percent, except as required to match the existing grade.

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

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

Aggregate surface course for temporary access will be measured for payment as each for every commercial entrance stage. If a residential drive is to be constructed under multiple stages, the aggregate needed to construct the second or subsequent stages will be measured separately.

<u>Basis of Payment</u>: The work will be paid for at the Contract unit price per Each for TEMPORARY ACCESS (COMMERCIAL ENTRANCE).

TEMPORARY ACCESS (ROAD)

The contractor shall construct and maintain aggregate surface course for temporary access to at Bloomingdale Avenue according to Article 402.07 and as directed by the Engineer.

The aggregate surface course shall be constructed to the dimensions and grades as follows, except as modified by the plans or as directed by the Engineer. The minimum width shall be 20 feet. The minimum compacted thickness shall be 6". The maximum grade shall be eight percent, except as required to match the existing grade.

Maintaining the temporary access shall include relocating and/or regrading the aggregate surface coarse for any operation that may disturb or remove the temporary access. The same type and gradation of material used to construct the temporary access shall be used to maintain it. When use of the temporary access is discontinued, the aggregate shall be removed and utilized in the permanent construction or disposed of according to Article 202.03."

Aggregate surface course for temporary access will be measured for payment as each for every commercial entrance stage. All aggregate needed to construct the second or subsequent stages will be included in a single payment for Bloomingdale Avenue.

Basis of Payment: The work will be paid for at the Contract unit price per Each for TEMPORARY ACCESS (ROAD).

STORM SEWER REMOVAL

At some locations along the project, the Contractor will be required to install proposed utilities in locations where an existing utility currently exists. At these locations the Contractor will be required to expose the existing storm sewer, saw-cut the sewer and careful remove a portion of it, wide enough to accommodate the proposed utility. The Contractor will then be required to brick and mortar both ends of the saw-cut sewer that is to remain.

This item will also be used to remove the existing storm laterals that cross Cornell. These sewers are very shallow and will be exposed or nearly exposed during the excavation process. These sewers will need to be fully removed as part of this project. The backfilling of this work will be paid for under TRENCH BACKFILL, SPECIAL.

Basis of Payment: The work will be paid for at the Contract unit price per Foot for STORM SEWER REMOVAL.

DUCTILE IRON WATER MAIN FITTINGS

Unless listed under other Contract items, all bends, crosses, tees, sleeves of all types, reducers, plugs or caps, and other fittings required to assemble and secure the proposed water mains along the route shown on the Plans shall be included under this item. All fittings shall be ductile iron type and be manufactured in the USA. The manufacturer shall furnish a certificate acknowledging the same to the Engineer.

The costs for furnishing and installing the standard joint accessories (gland, gasket, and bolts) for these fittings shall be included in the Contract unit price for this item and shall not be paid for separately. The payment under this item shall be based upon the casting and accessories' weight for cast iron fittings.

The Contractor shall maintain a list of fittings installed and shall provide an invoiced listing of the body casting and accessories weights of these fittings to be used for determining the payment for this item. All concrete blocking to be furnished and installed shall be considered incidental work under this item.

All bolts on mechanical joints and flange joints shall have corrosion protection caps. The bolts shall have sufficient lengths to accommodate the installation of the corrosion protection caps.

Certain mechanical-joint fittings at critical locations may be designated by the Engineer to have wedge-type thrust restraint glands. The furnishing and installing of these types of thrust restraint glands shall be as specified and paid for under separate Contract items.

<u>Basis of Payment</u>: The work will be paid for at the Contract unit price per Pound for DUCTILE IRON WATER MAIN FITTINGS

CONNECTION TO EXISTING WATER MAIN 12"

This item shall include the connection and disconnection work at Armitage Avenue in accordance with the details on the plans. The proposed twelve-inch (12") water main will be connected to existing twelve inch (12") water mains located within Armitage Avenue. This item includes payment of one connection/disconnection at each location. Any disconnection work at this location shall be included under this item.

The Contractor shall arrange with the Village Water Superintendent as to what time and for how long the water mains can be shut down. The Contractor shall have all necessary fittings, valves, and equipment required at the job site prior to the actual shut down being made. Once the shut-down is made, the Contractor shall work straight through until the valve and fittings necessary have been installed and the existing water mains can be placed back into service, regardless of the time taken.

The Village must be given a minimum of two (2) days advanced notice of any work to be done by the Contractor that may disturb the normal operation of the water system. The Village's acceptance must be obtained prior to any such work being undertaken by the Contractor.

To perform these connections, the Contractor, with the assistance and supervision of the Village Water Department, shall make the necessary valve closings at these locations, remove the located fittings and sections of water main, and then proceed to install the connection as detailed on the Plans.

The associated water main, fittings, valves, and valve vaults will each be paid for separately under their respective Contract Pay Items. This item shall include all other work that must be performed at these locations by the Contractor and that is not included under the various Contract Pay Items listed in the Schedule of Prices and described in these Specifications.

At locations where multiple connections will be made to the new pipe these will be performed under one shutdown connection/disconnection.

Basis of Payment: The work will be paid for at the Contract unit price per Each for CONNECTION TO EXISTING WATER MAIN 12".

CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID, SPECIAL

This item consists of the placement of a catch basin, four feet (4') in diameter. This item shall consists of furnishing all work and materials, including the necessary cast iron frames and grates necessary to construct a storm sewer manhole in accordance with Section 602 of the "Standard Specifications". All precast manholes shall conform with ASTM 478 and also to design dimensions. Cones and sections shall be free from fractures and surface roughness, and free from gravel pockets. Construction of this item shall also be according to the details shown on the plans and conforming to the lines, grades, and dimensions shown on the construction plans, including the necessary cored openings for proposed under drains.

The Contractor will be responsible for ensuring that the pipe openings are formed in the correct locations so that additional cutting of the precast structure is not necessary. A minimum of 2" and a maximum of 6" of adjustment rings will be required.

Butyl rubber gasket compound shall be used to seal the various structure joints.

All trench backfill used to fill around the new structure will be included in the cost of this item.

Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the structure to be installed shall be included in the cost of the structure to be installed.

Flat tops (IDOT Standard 602601) shall be used in lieu of the tapered tops.

All trench backfill used to fill around the new structure will be included in the cost of this item. Any pipe, up to four feet (4') in length per each pipe, used to connect existing pipes to the structure to be installed shall be included in the cost of the structure to be installed.

Basis of Payment: This item will be paid for at the Contract unit price per Each for CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID, SPECIAL.

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

The construction of the combination concrete curb and gutter shall be in accordance with Section 606 of the Standard Specifications and the details for this item as shown on the Plans. This item will include a "ledge" along the back of curb for the proposed sidewalk to be installed upon. This item will be used for the east side of the roadway.

The proposed gutter flag shall have a minimum thickness of ten inches (10") and shall be placed on a 2" stone cushion (included in the cost of this item). The height of the <u>curb head shall vary</u> with the grades shown on the Plans or as directed by the Engineer. If the Contractor fails to properly cut the joints in the specified time period and the curb cracks, the entire curb section will be replaced from the nearest adjacent tooled joint.

After removal of the "back of curb" form, the excavated area behind the curb designated for sodding shall be immediately backfilled with select non-organic earth backfill in preparation for the placement of the topsoil. All areas where concrete or asphalt pavement is to be constructed shall be backfilled with crushed stone, gradation CA-7 and properly compacted. This stone must be compacted prior to framing the proposed sidewalk or driveway. The placement of the required backfill material shall be considered included in the cost of the placement of the curb and gutter.

Masonite and steel forms will not be allowed.

Included in this item is furnishing and placing the crushed stone cushion under the proposed concrete, expansion joints, dowel bars, forming, concrete needed to construct the curb and gutter, backfilling the curb and gutter, and all labor, material, and equipment necessary to construct this item.

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per foot of COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL).

TRAFFIC CONTROL PLAN

Effective: September 30, 1985 Revised: January 1, 2007

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," any special details and Highway Standards, contained in the plans, and the Special Provisions contained herein.

Special attention is called to Article 107.09 of the Standard Specifications and the following highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall contract the District One Bureau of Traffic at least 72 hours in advance of beginning work.

STANDARDS 701006-05, 708101-04, 701301-04, 701311-03, 701501-06, 701701-09, 701801-05, and 701901-03

SPECIAL PROVISIONS

Project Staging and Local Access
Public Convenience and Safety (District 1)
Temporary Information Signing
Pavement Marking Removal (BDE)
Traffic Control Deficiency Deduction (BDE)
Maintenance of Roadway
Traffic Control and Protection (Arterials)
Flaggers in Work Zones

DETAILS (included on Plans):

Maintenance of Traffic

(TC-10) Traffic Control and Protection for Side roads, Intersections, and Driveways

(TC-13) District One Typical Pavement Markings

(TC-21) Detour signing for Closing State Highways

(TC-22) Arterial Road Information Sign

(TC-26) Driveway Entrance Signing

When traffic is to be directed over a detour route, the Contractor shall furnish, erect, maintain and remove all applicable traffic control devices along the detour route according to the details shown in the plans.

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

TRAFFIC CONTROL AND PROTECTION (ARTERIALS)

Effective: February 1, 1996

Revised: March 1, 2011

Specific traffic control plan details and Special Provisions have been prepared for this Contract. This work shall include all labor, materials, transportation, handling and incidental work necessary to furnish,

install, maintain, and remove all traffic control devices required as indicated in the plans and as approved by the Engineer.

When traffic is to be directed over a detour route, the Contractor shall furnish, erect, maintain, & remove all applicable traffic control devices along the detour route according to the details shown in the plans.

Method of Measurement: All traffic control (except TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)) and temporary pavement markings) indicated on the traffic control plan details and specified in the Special Provisions will be measured for payment on a lump sum basis.

<u>Basis of Payment:</u> All traffic control and protection will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

Temporary pavement markings will be paid for separately unless shown on a Standard.

REMOVE AND RE-ERECT EXISTING SIGN

Existing village street name signs and other miscellaneous informational signs shall be removed by the contractor and stored in a secure location designated by the village during the course of construction. The contractor shall assume liability for lost or stolen signs and posts and shall replace these items at their own expense. The engineer will determine what signs shall be removed. The existing sign posts shall also be removed (and stored along with the signs). Prior to removal, the Contractor shall document the location of each sign and post to serve as a guide during their replacement. If the current location cannot be reused for the sign posts, the Contractor will be required to pour a 12" diameter concrete foundation to a depth of 42".

The existing street name signs shall be replaced as close to the original location as possible – unless otherwise directed by the engineer. This new material will be included in the cost for this contract item. The manner of sign attachment must be acceptable to the Engineer.

Basis of Payment: Payment for this item shall be at the Contract unit price per Each for REMOVE AND RE-ERECT EXISTING SIGN.

DRAINAGE STRUCTURES TO BE REMOVED

This item shall include removing existing manholes, catch basins, or inlets in accordance with Section 605 of the Standard Specifications.

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

DUST CONTROL WATERING

This work shall consist of the exclusive control of dust resulting from construction operations. Dust shall be controlled by the uniform application of sprinkled water and shall be applied only when directed by the engineer, in a manner meeting his approval.

All equipment used for this work shall meet the Engineer's approval. The contractor will be responsible for obtaining a hydrant meter from the Village of Melrose Park's Water Department. All water used shall be properly documented by ticket or other approved means. The Village of Melrose Park shall designate locations where the Contractor may obtain water. This work will be measured in units of gallons of water applied. One unit will be equivalent to 1,000 gallons of water applied.

<u>Basis of Payment</u>: This item shall be paid for at the Contract unit price per Unit of DUST CONTROL WATERING.

FILLING DRAINAGE STRUCTURES

This item shall consist of the abandonment of drainage structures at locations shown on the plans or as directed by the Engineer. The structure shall be removed to the bottom of existing cone structure, but a minimum of twelve inches (12") below grade and all debris and water shall be removed from the structure. The remainder of the structure shall be filled with compacted trench. A steel plate shall be placed over the top of the structure after it has been backfilled.

It shall also be the responsibility of the contractor to seal with brick and mortar all pipes at both ends that connect to these structures.

Basis of Payment: This item shall be at the Contract unit price per Each for FILLING DRAINAGE STRUCTURES.

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:

Article/Section

		1 11 th 51 to 10 to 11
a.)	Sign Base (Notes 1 & 2)	1090
b.)	Sign Face (Note 3)	1091
c.)	Sign Legends	1092
d.)	Sign Supports	1093
d.) Sign Supports e.) Overlay Panels (Note 4)		1090.02
Note 1.	The Contractor may use 5/8 inch (16 mm) plywood.) instead of 3/4 inch (19 mm) thick
Note 2.	Type A sheeting can be used on the plywo	ood base.

Item

Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.

The overlay panels shall be 0.08 inch (2 mm) thick. Note 4.

GENERAL CONSTRUCTION REQUIRMENTS

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.

PRESSURE CONNECTION TO EXISTING WATER MAIN

At the location shown on the Plans, the proposed twelve inch (12") water main shall be connected to the existing eighteen inch (18") water main using a ductile iron mechanical tapping sleeve or a stainless steel flange tapping sleeve (Smith Blair 663 or approved equal) and valve. The tapping valve shall be a resilient seated gate valve equal to that being installed at other locations on this project. The sleeve and valve shall be installed within a five foot (5') diameter valve vault as shown on the Plans.

The valve shall be manufactured to meet all applicable requirements of AWWA Standards for resilient seated gate valves, C509-80, C500, and C504. Valve seats shall be bubble-tight (zero leakage) at 200 psi water working pressure. Valves shall have non-rising stems, opening by turning left and provided with a two inch (2") square nut, with arrow cast into the flange metal to indicate direction of opening. Each valve shall have its maker's name, pressure rating, and year in which manufactured cast onto the body. Prior to shipment from the factory, each valve shall be tested with hydrostatic pressure to equal that specified by AWWA Standard 504 for Class 150 valves.

Each valve shall have a smooth unobstructed waterway free from any sediment pockets. The cast iron valve gate shall have a replaceable, internally reinforced, specially contoured, molded rubber seat ring attached to the face of the gate with self-locking stainless steel screws, ASTM D2000, 4AA, 730. The bronze stem nut shall be integrally cast in the cast iron gate to prevent building, twisting, or angling. An anti-friction washer shall be located above the thrust collar portion of the stem to reduce friction and to provide a more effective conversion of operating torque into seating loads. Stuffing boxes shall have "O" ring seals with two (2) rings, one (1) located above the thrust collar and one (1) located below. The space between the "O" rings is to be filled with a lubricant to reduce operating torque and wear. The stem shall be made of rolled bronze, integral with the thrust collar. The exterior of the valve shall be coated with an asphaltic varnish. The interior of the valve and the valve gate shall be covered with a thermosetting epoxy coating, approved for potable water handling.

The tapping sleeve and valve shall be enclosed in a 5' diameter precast concrete vault manufactured in accordance with A.S.T.M. C-478, with a reinforced concrete flat slab top, IDOT Standard 602601. Steps shall be installed in the vault to allow for safe entry and exit for personnel working within the vault.

Openings shall be cast into the lower barrel section of the vault to allow for the water main to pass through the vault. These openings shall be large enough so that no part of the barrel section rests directly on the water main. The void between the water main and the barrel section shall be filled with cement brick and mortar. A coat of mortar, one-half inch (1/2") thick shall be applied to the inside and outside surfaces of the brick and mortar areas. The frame shall be centered over the gate valve as directed by the engineer. The cast iron lid shall have the word "WATER" cast in raised letters for each vault. Within each valve vault, as indicated on the Plans, one inch (1") diameter brass corporation stops are to be installed on each side of the new gate valve and shall be manufactured in accordance with AWWA C-800 and ASTM B-62 specifications. The inlet side of the corporation assembly is to be

machined with AWWA threads, the outlet shall have standard threading to attach flared one inch (1") diameter copper tubing.

The vault will not be included in the cost of this item.

<u>Basis of Payment:</u> This work will be paid for at the Contract unit price per Each for PRESSURE CONNECTION TO EXISTING WATER MAIN.

RAILROAD TRACK REMOVAL

Crossing Cornell Avenue, there are old abandoned rails that have been paved over. This item involves the removal of the existing rails of numerous rails (approximately 12 spaced approximately 4" apart) and possibly cross members or ties. The item will be paid for as only one length across Cornell regardless of how many rails are found.

The contractor will be required to remove and properly dispose of any existing rails and ties encountered during the project. Any salvage value for the rail removal shall be reflected in the unit price.

<u>Basis of Payment</u>: Payment for this item shall be at the Contract unit price per Foot of RAILROAD TRACK REMOVAL,

SAW CUTTING

This work shall be done where any new pavement, curb and gutter, frames and grates, structures, sidewalks, or driveways abut existing pavement, curb and gutter, sidewalks, or driveways. All required saw-cutting work should be included in the pertinent individual pay items in the Contract unless specifically called out as a pay item. The only saw cutting that will be paid for separately are the saw-cuts that will need to be made longitudinally along Cornell Avenue to allow for removal of the road to complete the described stage construction sequence and the saw cutting required at the limits of PCC Pavement at North Avenue.

Basis of Payment: This work will be paid for at the Contract unit price per Foot for SAW CUTTING.

TEMPORARY PAVEMENT

This work shall consist of the removal of loose and broken pavement and the construction of a temporary hot-mix asphalt patch on the existing roadway, which will be used to maintain traffic during construction. The locations will be specified by the engineer in the field and will include placing 1.5" of mix over certain portions of the existing pavement and trenches to maintain access. The subsequent removal of the pavement will also be included in this item.

Hot-Mix Asphalt Surface Course, Mix D, N50 (IL-9.5mm) shall be used for this pay item.

Basis of Payment: This item shall be at the Contract unit price per Square Yard for TEMPORARY PAVEMENT.

TEMPORARY TRAFFIC SIGNAL TIMINGS

Description.

This work shall consist of developing and maintaining appropriate traffic signal timings for the specified intersection for the duration of the temporary signalized condition, as well as impact to existing traffic signal timings caused by detours or other temporary conditions.

All timings and adjustments necessary for this work shall be performed by an approved Consultant who has previous experience in optimizing Closed Loop Traffic signal Systems for District One of the Illinois Department of Transportation. The Contractor shall contact the Traffic Signal Engineer at (847) 705-4424 for a listing of approved Consultants.

The following tasks are associated with TEMPORARY TRAFFIC SIGNAL TIMINGS; the consultant shall attend temporary traffic signal inspection (turn-on) and/or detour meeting and conduct on-site implementation of the traffic signal timings. Make fine-turning adjustments to the timings in the field to alleviate observed adverse operating conditions and to enhance operations.

- (b) Consultant shall provide monthly observation of traffic signal operations in the field.
- (c) Consultant shall provide on-site consultation and adjust timings as necessary for construction stage changes, temporary traffic signal phase changes, and any other conditions affecting timing and phasing, including lane closures, detours, and other construction activities.
- (d) Consultant shall make timing adjustments and prepare comment responses as directed by the Area Traffic Signal Operations Engineer.

Basis of Payment: The work shall be paid for at the contract unit price each for TEMPORARY TRAFFIC SIGNAL TIMINGS, which price shall be payment in full for performing all work described herein per intersection. When the temporary traffic signal installation is turned on and/or detour implemented, 50 percent of the bid price will be paid. The remaining 50 percent of the bid price will be paid following the removal of the temporary traffic signal installation and/or detour.

PRESSURE TESTING AND DISINFECTION

The water mains installed under this Project shall be pressure-tested and disinfected in accordance with the Specifications herein described.

The new water mains or any valved sections of it shall be subject to a hydrostatic pressure test in basic compliance with Section 41-2.13 of the "Standard Specifications for Water and Sewer Main Construction in Illinois". The pipe shall be subjected to a hydrostatic pressure of one hundred fifty (150) pounds per square inch. Duration of each pressure test shall be for a period of not less than two (2) hours for pipes that have been backfilled before tests are made.

All joints showing visible leaks shall be repaired until tight. Any cracked or defective pipe, fitting, or valves discovered in consequence of this pressure test shall be removed and replaced by the Contractor with sound material and the test shall be repeated.

Suitable means shall be provided by the Contractor for determining the quantity of water lost by leakage under the specified test pressure. Allowable leakage shall not be greater than that computed by the following table.

Diameter of Pipe	Allowable Leakage in Gal/Hr/1,000 Ft
12 Inch	1.10
10 Inch	0.92
8 Inch	0.74
6 Inch	0.55

Leakage is defined as the quantity of water to be supplied in the newly laid pipe or any valved section of it necessary to maintain the specified leakage test pressure after the pipe has been filled with water and the air expelled.

After satisfactory completion of the hydrostatic testing, the piping shall be flushed to remove any solutions, debris, or contaminated materials that may have lodged within the piping. The flow velocity of the water in the piping during the flushing shall be not less than 2.5 feet per second and shall be a maximum velocity sufficient to deliver clear, debris-free water at the discharge point. Water mains shall be disinfected by or under the direction of an experienced professional chlorination technician retained by the Contractor, in a manner acceptable to the Engineer and the State Department of Health, and in accordance with AWWA Standard C651-99. After the chlorination process, water samples shall be collected at each of the sampling taps and submitted to the laboratory for bacteriological examination of two (2) separate days. Should the chlorination fail to result in approval, the chlorination procedures shall be repeated until satisfactory results are obtained. Sampling taps shall not be paid for as a separate item, but shall be included in this item.

The supply of water necessary to pressure-test and disinfect the proposed water main shall be provided by the Village of Melrose Park through connections to its water system.

<u>Basis of Payment:</u> This item shall be at the Contract unit price per Lump Sum for PRESSURE TESTING AND DISINFECTION.

RESTRAINED JOINT 8"

At locations specified by the Engineer, water main fittings shall be restrained by the use of Retainer Glands. These retainer glands will only be paid for at locations where they have been specified by the Engineer.

Basis of Payment: This item shall be at the Contract unit price per Each for RESTRAINED JOINT 8".

RESTRAINED JOINT 6"

At locations specified by the Engineer, water main fittings shall be restrained by the use of Retainer Glands. These retainer glands will only be paid for at locations where they have been specified by the Engineer.

Basis of Payment: This item shall be at the Contract unit price per Each for RESTRAINED JOINT 6".

RESTRAINED JOINT 12"

At locations specified by the Engineer, water main fittings shall be restrained by the use of Retainer Glands. These retainer glands will only be paid for at locations where they have been specified by the Engineer.

Basis of Payment: This item shall be at the Contract unit price per Each for RESTRAINED JOINT 12".

RESTRAINED JOINT 4"

At locations specified by the Engineer, water main fittings shall be restrained by the use of Retainer Glands. These retainer glands will only be paid for at locations where they have been specified by the Engineer.

Basis of Payment: This item shall be at the Contract unit price per Each for RESTRAINED JOINT 4".

GENERAL ELECTRIC 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 inspection shall be made no less than seven (7) calendar days prior to the desired inspection date. The maintenance transfer and preconstruction inspection 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. Condition of Existing Systems. 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 5^{th} 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:

"Resubmittals. 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

Energy and Demand Charges. 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:

"Lighting Cable Identification. 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	Equipment	Latitu	Longitud
Description	Designation	de	e
CCTV Camera pole	ST42	41.580	-
		493	87.793378
FO mainline splice	HHL-ST31	41.558	-
handhole		532	87.792571
Handhole	HH at STA 234+35	41.765	
		532	87.543571
Electric Service	Elec Srv	41.602	-
		248	87.794053
Conduit crossing	SB IL83 to EB I290	41.584	
	ramp SIDE A	593	87.793378
Conduit crossing	SB IL83 to EB I290	41.584	1
	ramp SIDE B	600	87.793432
Light Pole	DA03	41.558	-
		532	87.792571
Lighting Controller	X	41.651	-
		848	87.762053
Sign Structure	FGD	41.580	-
		493	87.793378
Video Collection	VCP-IK	41.558	-
Point		532	87.789771
Fiber splice	Toll Plaza34	41.606	-
connection		928	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."

ADJUSTMENTS AND RECONSTRUCTIONS

Effective: March 15, 2011

Revise the first paragraph of Article 602.04 to read:

"602.04 Concrete. Cast-in-place concrete for structures shall be constructed of Class SI concrete according to the applicable portions of Section 503. Cast-in-place concrete for pavement patching around adjustments and reconstructions shall be constructed of Class PP-1 concrete, unless otherwise noted in the plans, according to the applicable portions of Section 1020."

Revise the third, fourth and fifth sentences of the second paragraph of Article 602.11(c) to read:

"Castings shall be set to the finished pavement elevation so that no subsequent adjustment will be necessary, and the space around the casting shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.05 to read:

"603.05 Replacement of Existing Flexible Pavement. After the castings have been adjusted, the surrounding space shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.06 to read:

"603.06 Replacement of Existing Rigid Pavement. After the castings have been adjusted, the pavement and HMA that was removed, shall be replaced with Class PP-1 concrete, unless otherwise noted in the plans, not less than 9 in. (225 mm) thick. The pavement may be opened to traffic according to Article 701.17(e)(3)b.

The surface of the Class PP concrete shall be constructed flush with the adjacent surface."

Revise the first sentence of Article 603.07 to read:

"603.07 Protection Under Traffic. After the casting has been adjusted and the Class PP concrete has been placed, the work shall be protected by a barricade and two lights according to Article 701.17(e)(3)b."

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.

DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (DISTRICT 1)

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

Add the following to Article 603.02 of the Standard Specifications:

- (j) Temporary Rubber Ramps (Note 2)

Note 1. The HMA shall have maximum aggregate size of 3/8 in. (95 mm).

Note 2. The rubber material shall be according to the following.

Property	Test Method	Requirement
Durometer Hardness, Shore A	ASTM D 2240	75 ±15
Tensile Strength, psi (kPa)	ASTM D 412	300 (2000) min
Elongation, percent	ASTM D 412	90 min
Specific Gravity	ASTM D 792	1.0 - 1.3
Brittleness, °F (°C)	ASTM D 746	-40 (-40)"

Revise Article 603.07 of the Standard Specifications to read:

"603.07 Protection Under Traffic. After the casting has been adjusted and the Class PP concrete has been placed, the work shall be protected by a barricade and two lights according to Article 701.17(e)(3)b.

When castings are under traffic before the final surfacing operation has been started, properly sized temporary ramps shall be placed around the drainage and/or utility castings according to the following methods.

- (a) Temporary Asphalt Ramps. Temporary hot-mix asphalt ramps shall be placed around the casting, flush with its surface and decreasing to a featheredge in a distance of 2 ft (600 mm) around the entire surface of the casting.
- (b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 40 mph or less and when the height of the casting to be protected meets the proper sizing requirements for the rubber ramps as shown below.

Dimension	Requirement [*]
Inside Opening	Outside dimensions of casting + 1 in. (25 mm)
Thickness at inside	Height of casting ± 1/4 in. (6 mm)
edge	
Thickness at	1/4 in. (6 mm) max.
outside edge	
Width, measured	8 1/2 in. (215 mm) min
from inside opening	
to outside edge	1

Placement shall be according to the manufacturer's specifications.

Temporary ramps for castings shall remain in place until surfacing operations are undertaken within the immediate area of the structure. Prior to placing the surface course, the temporary ramp shall be removed. Excess material shall be disposed of according to Article 202.03."

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:
CONTRACTOR TO THE TOTAL THE TOTAL TO THE TOTAL THE TOTAL TO THE TOTAL THE TOTAL TO THE TOTAL TOT		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 Combination: Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) 1/ Crushed Steel Slag 1/ Crushed Concrete					
HMA High ESAL	D Surface IL-12.5 or IL-9.5	Allowed Alone or in Combination: Crushed Gravel Carbonate Crushed Stone (other than Limestone) Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) 1/ Crushed Steel Slag 1/ Crushed Concrete					
		Other Combinations Al	lowed:				
	Tarakan marana	Up to	With				
		25% Limestone Dolomite					
50% Limest		50% Limestone	Any Mixture D aggregate other than Dolomite				
		Crushed Slag (ACBF) ^{1/} or Crushed Sandstone					

Use	Mixture	Aggregates Allowed				
HMA High ESAL	F Surface IL-12.5 or IL-9.5	Allowed Alone or in Constalline Crushed Sandstone Crushed Slag (ACBF Crushed Steel Slag ^{1/2} No Limestone or no Constalline Combinations of Constalline Crushed Gravel, or Dolomite	Stone) ^{1/} Crushed Gravel alone.			
HMA High ESAL	SMA Ndesign 80 Surface	Crystalline Crushed S Crushed Sandstone Crushed Steel Slag	Stone			

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."

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 \pm 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.

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.

High ESAL	IL-25.0 binder; IL-19.0 binder;
uigii coal	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/														
Sieve	IL-25.0		IL-19.0 IL-12.5		IL-9.5		IL-4.75		SMA 4/		SMA 4/			
Size	n	mm mm		mm		m	mm n		mm IL		2.5	IL-9.5		
						,					, mm		mm	
	Min	max	min	max	min	max	min	max	min	max	min	max	min	max
1 1/2 in		100												
(37.5 mm)					.									
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											12	16	12	18
(600 µm)														
#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/Asph alt 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 \geq 90.
- 3/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign \geq 90.
- 4/ The maximum percent passing the 20 μ 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 (VMA), % minimum				Voids Filled with Asphalt Binder		
Ndesign	IL-25.0	IL-19.0	IL-12.5	IL-9.5	IL- 4.75 ^{1/}	(VFA), %
50 70 90 105	12.0	13.0	14.0	15.0	18.5	65 – 78 ^{2/} 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 Requirements SMA ^{1/}			
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %	
80 ^{4/}	3.5	17 ² / 16 ³ /	75 - 83	

- 1/ Maximum Draindown shall be 0.3%.
- 2/ Applies when specific gravity of coarse aggregate is ≥ 2.760 .
- 3/ 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.*

2) Design Verification and Production

<u>Description</u>. 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.

^{*}Blending of different types of aggregate will not be permitted.

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."

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDED-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 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/}

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.

Max Asphalt Binder Replacement for FRAP with RAS Combination

HMA Mixtures 1/2/4/	Maximum % ABR		
Ndesign	Binder/Leveling	Surface	Polymer Modified ^{3/}
	Binder		Modified 37
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

- 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.
- 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."

BITUMINOUS PRIME COAT FOR HOT-MIX ASPHALT PAVEMENT (FULL DEPTH) (D-1) Effective: May 1, 2007

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) at a rate of 0.02 to 0.05 gal/sq yd (0.1 to 0.2 L/sq m), the exact rate to be determined by the Engineer."

Revise 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 gallon (liter) or per ton (metric ton) for BITUMINOUS MATERIALS (PRIME COAT)."

SIGN SHOP DRAWING SUBMITTAL

Effective: January 22, 2013

Add the following paragraph to Article 720.03:

"Shop drawings will be required, according to Article 105.04, for all Arterials/Expressway signs except standards/highway signs covered in the MUTCD. Shop drawings shall be submitted to the Engineer for review and approval prior to fabrication. The shop drawings shall include dimensions, letter sizing, font type, colors and materials."

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

Effective: August 1, 2012

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

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

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

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

TPG under the Contract and the number of hours for which the incentive payment provided under this Special Provision will be or has been claimed for the TPG.

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

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

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

The Contractor shall provide training opportunities aimed at developing full journeyworker in the type of trade or job classification involved. The initial number of TPGs for which the incentive is available under this contract is 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 by Intergovernmental Agreement with the Illinois Community College Board to provide screening, tutoring and pre-training to individuals interested in working in the applicable construction classification and has certified those students who have successfully completed the program and are eligible to be TPGs. A designated IDOT staff member, the Director of the Office of Business and Workforce Diversity (OBWD), will be responsible for providing assistance and referrals to the Contractor for the applicable TPGs. For this contract, the Director of OBWD is designated as the responsible IDOT staff member to provide the assistance and referral services related to the placement for this Special Provision. For purposes of this Contract, contacting the Director of OBWD and interviewing each candidate he/she recommends constitutes reasonable recruitment.

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

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

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

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

Page 1 of 3



Illinois Environmental Protection Agency

• 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control Notice of Intent (NOI) for General Permit to Discharge Storm Water Associated with Construction Site Activities

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at the above address. For Office Use Only

OWNER INFORMATION			Permit No. ILR10
Company/Owner Name: Village of Me	lrose Park	· · · · · · · · · · · · · · · · · · ·	
Mailing Address: 1000 N 25th Ave		Phone:	(708) 343-9500
City: Melrose Park	State: IL Zip: 60164	Fax: _	
Contact Person: Gary Marine, Direct	or of Public Works	E-mail: gmarinepwo	lir@melrosepark.org
Owner Type (select one) City			
	The state of the s	MS4 Com	munity: 🗸 Yes 🦳 No
CONTRACTOR INFORMATION			
Mailing Address: City:	State: Zin:		
			AND THE STREET S
CONSTRUCTION SITE INFORMA			
Select One: New Char Project Name: Cornell Avenue Reco			Cook
Street Address: Cornell Avenue	Cify: Melros		Zip; 60164
Latitude: 41 54 25			
	• '		tion Township Range
Approximate Construction Start Date			•
Total size of construction site in acres		 	~~~
If less than 1 acre, is the site part of a			s Schedule for Construction Sites: s than 5 acres - \$250
Yes No	haiger common plan of develop		more acres - \$750
STORM WATER POLLUTION PRE	EVENTION PLAN (SWPPP)		
Has the SWPPP been submitted to the	•	✓ Yes] No
(Submit SWPPP electronically to: epa	, , , = = = =		
Location of SWPPP for viewing: Addre	ess: 9933 Roosevelt Road	•	City: Westchester
SWPPP contact information:			Inspector qualifications:
Contact Name: Chris Baker			P.E.
Phone: 708-865-0300	Fax: 708-865-1212	E-mail: cbaker@	ehancock.com
Project inspector, if different from abou	re		Inspector qualifications:
Inspector's Name:			
Phone: F	ax	E-mail:	
This Agency is authorized	lo require this information under Section 4 and	I Title X of the Environmental P	rotection Act (415 ILCS 5/4, 5/39). Failure to

Rev 5/10

IL 532 2104 WPC 623 disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and an additional civil penalty of not to exceed \$10,000 for the violation and additional civil penalty of not to exceed \$10,0 each day during which the violation continues (415 LCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

TYPE OF CONSTRUCTION (select one) Construction Type Reconstruction	
SIC Code:	
Type a detailed description of the project:	<u>-</u> .
This project will involve the removal of existing asphalt pavemen	nt, curb and gutter, sidewalk, and driveways. The old
infrastructure will be replaced with a new Portland Cement Con-	
path on the west. Additionally, new storm sewer and water mai	n will be installed as part of the project. All non-
impervious parkway within the Village Right-Of-Way will be reso	odded.
HISTORIC PRESERVATION AND ENDANGERED SPEC	IES COMPLIANCE
Has the project been submitted to the following state agencies to Illinois law on:	satisfy applicable requirements for compliance with
Historic Preservation Agency ☐ Yes ☑ No	•
Endangered Species Yes V No	
RECEIVING WATER INFORMATION	
Does your storm water discharge directly to: U Waters of the	State or Storm Sewer
Owner of storm sewer system: Village of Melrose Park	·
Name of closest receiving water body to which you discharge:	Silver Creek
Mail completed form to: Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217) 782-0610 FAX: (217) 782-9891	
Or submit electronically to: epa.constilr10swppp@illinois.gov	
I certify under penalty of law that this document and all attachme in accordance with a system designed to assure that qualified pesubmitted. Based on my inquiry of the person or persons who may for gathering the information, the information submitted is, to the complete. I am aware that there are significant penalties for submand imprisonment. In addition, I certify that the provisions of the pof a storm water pollution prevention plan and a monitoring programment. In addition, I certify that the provisions of the pof a storm water pollution prevention plan and a monitoring programment. In addition, I certify that the provisions of the pof a storm water pollution prevention plan and a monitoring programment. In addition, I certify that the provisions of the pof a storm water pollution prevention plan and a monitoring programment. In addition, I certify that the provisions of the pof a storm water pollution prevention plan and a monitoring programment. In addition, I certify that the provisions of the pof a storm water pollution prevention plan and a monitoring programment. In addition, I certify that the provisions of the pof a storm water pollution prevention plan and a monitoring programment. In addition, I certify that the provisions of the posterior water pollution prevention plan and a monitoring programment.	ersonnel properly gather and evaluate the information change this system, or those persons directly responsible best of my knowledge and belief, true, accurate, and nitting false information, including the possibility of fine permit, including the development and implementation champlan, will be complied with.
	0 00 17
Hory M. Marin	8-23-13
/ Owner Signature:	Date:
Sove M. M. Alux Owner Signature: Gary Marine Gray M. MARINE	Director of Public Works
Printed Name:	Title;

INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITY NOTICE OF INTENT (NOI) FORM

Submit original, electronic or facsimile copies. Facsimile and/or electronic 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 upper right hand corner of the first page.

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at:

Illinois Environmental Protection Agency Division of Water Pollution Control Permit Section

Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217) 782-0610 FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

Reports must be typed or printed legibly and signed.

Any facility that is not presently covered by the General NPDES Permit for Storm Water Discharges From Construction Site Activities is considered a new facility.

If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line, changes of information or permit renewal notifications do not require a fee.

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"

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 at the above address.

Construction sites with less than 5 acres of land disturbance - fee is \$250.

Construction sites with 5 or more acres of land disturbance - fee is \$750.

SWPPP should be submitted electronically to: epa.constilr10swppp@illinois.gov When submitting electronically, use Project Name and City as indicated on NOI form.



Storm Water Pollution Prevention Plan

Route	Cornell Avenue	Marked Rte.	Cornell Avenue
Section	13-00125-00-PV	Project No.	M-4003(177)
County	Cook	Contract No.	
	has been prepared to comply with the provisions of th		
	 LR10 (Permit ILR10), issued by the Illinois Environs struction site activities. 	mental Protection	n Agency (IEPA) for storm water discharges
L cortify u	under penalty of law that this document and all attach	mente were nre	angred under my direction or supervision in
accordance	ce with a system designed to assure that qualified p	personnel prope	rly gathered and evaluated the information
	. Based on my inquiry of the person or persons who r the information, the information submitted is, to the bes		
	the information, the information submitted is, to the best that there are significant penalties for submitting false		
for knowin	ng violations.		
	Open Marting 1	(A_{\sim})	M. W.
	Gary Marine Print Name	<u>XXX</u>	/ Signature
•	Director of Public Works		08/23/2013
	Title Village of Melrose Park		Date
	Agency		
I. Site	Description:		
A.	Provide a description of the project location (include la	ititude and longit	ude):
	The improvements will occur on Cornell Avenue from I		orth to Armitage Avenue. This roadway is
	within the corporate limits of Melrose Park. The project Latitude: 41 degrees, 54 minutes, and 25 seconds	ct begins at:	
	Longitude: 87 degrees, 52 minutes, and 13 seconds.		
B.	Provide a description of the construction activity which	is the subject of	this plan:
	The improvements will reconstruct and widen the exis		
	part of these improvements the curb and gutter will Additionally, the full sidewalk will be replaced on the ea		
	of the roadway. These improvements will necessitate		
	the Right-of-Way.		•
	Storm sewer and water main improvements will also be	e initiated under	this improved roadway.

C. Provide the estimated duration of this project:

It is predicted that construction will commence on this project in April of 2014 and last for approximately 6 months.

D. The total area of the construction site is estimated to be 3.78 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 3.78 acres.

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

0.831

F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:

Printed 8/23/2013 BDE 2342 (Rev. 1/28/2011)

This construction site is considered to be "built-up" and contains impervious materials. The soil type is not considered to be erosive.

G. Provide an aerial extent of wetland acreage at the site:

There are no wetlands throughout this project.

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

There are no potentially erosive areas associated with this project.

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

The improvements will require excavation of the existing roadway and subgrade to facilitate the installation of new pavement and curb and gutter along the entire project. After the pavement has been restored the existing parkways will be stripped and regraded to allow uniform grade from face of walk to top of curb. The site is relatively flat with grades typically less than 1 percent.

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

The Village of Melrose Park owns the sewer system that will convey the storm water to the Village of Melrose Park's trunk line sewer as it outfalls to Silver Creek.

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

After draining through inlet filters and the strorm sewer networks, the storm water will drain to Silver Creek.

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

N/A, but all storm sewer inlet structures will utilize inlet filters.

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

	The Addition
\Box	Floodplain
	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
	Other
1.	303(d) Listed receiving waters (fill out this section if checked above):

- a. The name(s) of the listed water body, and identification of all pollutants causing impairment:
- b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:
- c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

BDE 2342 (Rev. 1/28/2011)

			d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:
		2.	TMDL (fill out this section if checked above)
			a. The name(s) of the listed water body:
			 b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:
			c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:
	Ο.	The f	ollowing pollutants of concern will be associated with this construction project:
	0.		Soil Sediment Concrete Concrete Truck Waste Concrete Curing Compounds Solid Waste Debris Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) Antifreeze / Coolants Waste water from cleaning construction equipment Other (specify) Other (specify) Solvents Fertilizers / Pesticides Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) Antifreeze / Coolants Waste water from cleaning construction equipment Other (specify) Other (specify) Other (specify) Other (specify)
II.	Con	trols:	
	desc will b the in any	ribed in e-respo mpleme propose	of the plan addresses the controls that will be implemented for each of the major construction activities I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor onsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for entation of the measures indicated. The Contractor, and subcontractors, will notify the Resident Engineer of ed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:
	A.	Erosio	on 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:
			☐ Preservation of Mature Vegetation ☐ Erosion Control Blanket / Mulching ☐ Vegetated Buffer Strips ☒ Sodding ☒ Protection of Trees ☐ Geotextiles ☐ Temporary Erosion Control Seeding ☐ Other (specify) ☐ Temporary Turf (Seeding, Class 7) ☐ Other (specify)
Printe	d 8/23/	2013	BDE 2342 (Rev. 1/28/2011)

	☐ Temporary Mulching☐ Permanent Seeding		Other (specify) Other (specify)
	Describe how the stabilization practices listed al	bove w	ill be utilized during construction:
	Existing trees, not to be removed, will be protect	ted dur	ing course of construction.
	Describe how the stabilization practices listed a completed:	above '	will be utilized after construction activities have been
	After the parkway work is completed, the parkwas possible.	/ays wi	II be restored and sodding will be performed as soon
2.	Structural Practices: Provided below is a desc	cription	of structural practices that will be implemented, to
	perimeter erosion barrier, earth dikes, drainage	the site e swale ain inle ermane	e. Such practices may include but are not limited to: es, sediment traps, ditch checks, subsurface drains, et protection, rock outlet protection, reinforced soil ent sediment basins. The installation of these devices
	The following structural practices will be used fo	r this p	roject:
	 □ 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 □ Turf Reinforcement Mats □ Permanent Check Dams □ Permanent Sediment Basin □ Aggregate Ditch □ Paved Ditch 		Rock Outlet Protection Riprap Gabions Slope Mattress Retaining Walls Slope Walls Concrete Revetment Mats Level Spreaders Other (specify) strategic location of stockpiles Other (specify) Other (specify) Other (specify)
	Describe how the structural practices listed about	ve will	be utilized during construction:
	system. The inlet controls consist of bagged in and debris. The inlet controls will be inspected	serts w weekly	
	structures to ensure proper drainage of roadwa erosion. The topsoil stockpiles are to be remov is forecasted	y. The red with	placed off of the curbline and away from drainage slopes of the stockpile will not exceed 2:1 to prevent in the working day or tarped when inclement weather
	Describe how the structural practices listed al	oove w	vill be utilized after construction activities have been

Once construction is complete, the inlet filters will be removed from the structures, but proper and timely maintenance of these structures will be perpetual.

- Storm Water Management: Provided below is a description of measures that will be installed during the 3. construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.
 - Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and

BDE 2342 (Rev. 1/28/2011)

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:

Existing and proposed catch basins will be utilized to collect sediment and prevent it from entering the storm sewer system, and ultimately the Salt Creek.

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:

The Village of MElrose Park is currently a MS4 Community with a storm water management plan. This work will be governed by both the MS4 plan requirements and IDOT specifications. In the event of a conflict between the two documents, the Engineer shall determine the governing document.

- 5. Contractor Required Submittals: Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.
 - a... The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
 - Approximate duration of the project, including each stage of the project
 - · Rainy season, dry season, and winter shutdown dates
 - Temporary stabilization measures to be employed by contract phases
 - · Mobilization timeframe
 - Mass clearing and grubbing/roadside clearing dates
 - Deployment of Erosion Control Practices
 - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
 - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
 - · Paving, saw-cutting, and any other pavement related operations
 - Major planned stockpiling operations
 - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
 - · Permanent stabilization activities for each area of the project
 - b. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
 - Vehicle Entrances and Exits Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
 - Material Delivery, Storage and Use Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
 - Stockpile Management Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
 - · Waste Disposal Discuss methods of waste disposal that will be used for this project.
 - Spill Prevention and Control Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
 - Concrete Residuals and Washout Wastes Discuss the location and type of concrete washout facilities to be

BDE 2342 (Rev. 1/28/2011)

used on this project and how they will be signed and maintained.

- Litter Management Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
- Vehicle and Equipment Fueling Identify equipment fueling locations for this project and what BMPs will be
 used to ensure containment and spill prevention.
- Vehicle and Equipment Cleaning and Maintenance Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- · Additional measures indicated in the plan.

III. Maintenance:

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

The erosion and sediment control measures will be maintainted as provided in Section II (A)(2) and inspected by the Engineer as provided below in Section IV. Any deficiencies will be noted to the Contractor and shall be corrected.

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.

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.



Contractor Certification Statement

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

Route	Cornell Avenue	Marked Rte.	Cornell Avenue
Section	12-00125-00-PV	Project No.	M-4003(177)
County	Cook	Contract No.	63771
Permit No I certify ur associated In addition mentioned	,	ion Agency. e Permit No. ILR entified as part o ation and requir naintenance proc	t 10 that authorizes the storm water discharges f this certification. Tements stated in the SWPPP for the above edures; and, I have provided all documentation
L Com			
☐ Sub-0	Contractor		
	Print Name		Signature
	· · · · · · · · · · · · · · · · · · ·		
	Title		Date
	Name of Firm		Telephone
	Street Address		City/State/ZIP
Items whic	ch this Contractor/subcontractor will be responsible	for as required in	Section II.5. of the SWPPP:
			(#************************************

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue, East; Post Office Box 19276; Springfield, IL 62794-9276

Division of Public Water Supplies

Telephone 217/782-1724

PUBLIC WATER SUPPLY CONSTRUCTION PERMIT

SUBJECT: MELROSE PARK (Cook County-0311860)

Permit Issued to:

Village President and Board of Trustees 1000 N. 25th Avenue Melrose Park, IL 60160

PERMIT NUMBER: 0206-FY2014

DATE ISSUED: October 1, 2013 PERMIT TYPE: Water Main

The issuance of this permit is based on plans and specifications prepared by the engineers/architects indicated, and are identified as follows. This permit is issued for the construction and/or installation of the public water supply improvements described in this document, in accordance with the provisions of the "Environmental Protection Act", Title IV, Sections 14 through 17, and Title X, Sections 39 and 40, and is subject to the conditions printed on the last page of this permit and the ADDITIONAL CONDITIONS listed below.

FIRM: Edwin Hancock Engineering, Co. NUMBER OF PLAN SHEETS: 18

TITLE OF PLANS: "Cornell Avenue **SR**"

PROPOSED IMPROVEMENTS:

Install 25 lineal feet of 18-inch water main, 2,600 lineal feet of 12-inch water main, 200 lineal feet of 8-inch water main, and 250 lineal feet of 6-inch water main

ADDITIONAL CONDITIONS:

- 1. All water mains shall be satisfactorily disinfected prior to use. In accordance with the requirements of AWWA C651-99, at least one set of samples shall be collected from every 1,200 feet of new water main. plus one set from the end of the line and at least one set from each branch. Satisfactory disinfection shall be demonstrated in accordance with the requirements of 35 III. Adm. Code 652.203.
- 2. There are no further conditions to this permit.

DCC:ECA: dsa

Edwin Hancock Engineering, Co. cc:

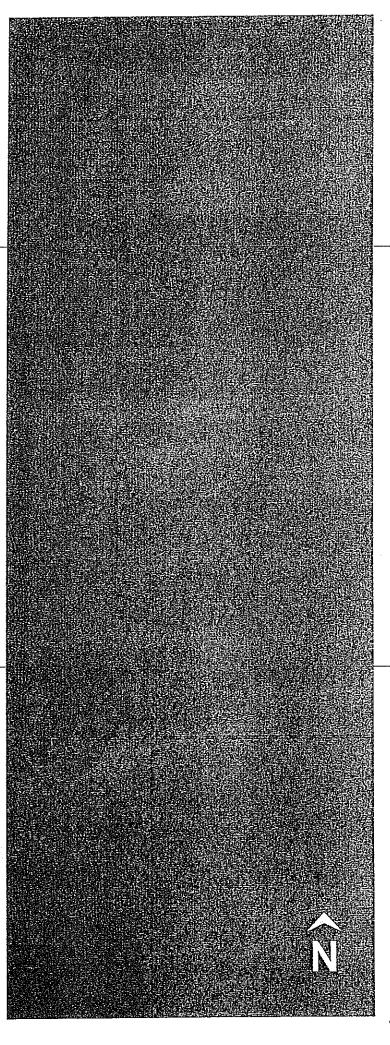
Elgin Region

Cook County Health Department

David'C. Cook, P.E.

Acting Manager Permit Section

Division of Public Water Supplies



Preliminary Site Investigation Report

Cornell Avenue Rehabilitation 1945-2085 North Cornell Avenue Melrose Park, Illinois

PREPARED FOR

Edwin Hancock Engineering Company 9933 Roosevelt Road Westchester, Illinois 60154

PREPARED BY

True North Consultants, Inc. 1240 Iroquois Avenue Suite 206 Naperville, Illinois 60563 Tele: 630.717.2880

PROJECT NUMBER TII3020

SUBMITTED ON April 8, 2013

the vicinity of the planned borings previously marked by the their respective utility representatives.

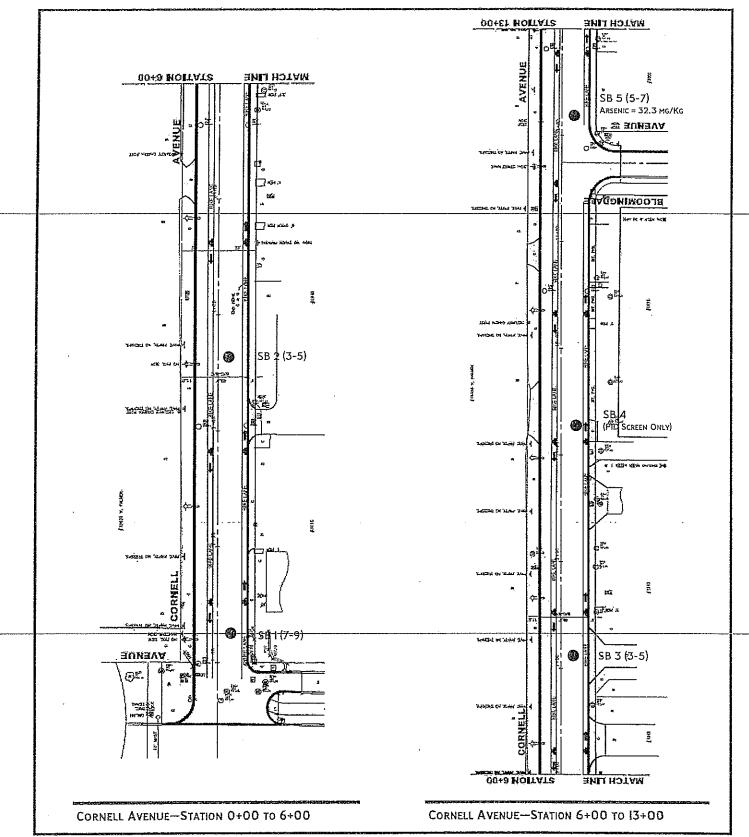
The subsurface investigation consisted of advancing ten (10) soil borings to a depth of 15 feet below ground surface (bgs). The locations of the borings were based on the location of the RPTA Compliance Properties and the recommended geotechnical boring spacing required for collection of geotechnical information. Figures 4 and 5 identify the approximate locations of the completed soil borings during the limited PSI activities. The following table provides the borings identification, the approximate station location of each boring, the depth of soil sample collection, and justification for the placement of the boring.

	Salini	eroniienes Similatras Polovaliete	a Spirit	: Justineation of Bozing Riscement
SP 1	1÷40	7 to 9	VOCs, PNAs, RCRA Metals	CCDD evaluation in the vicinity of North Avenue
SP 2	3÷50	3 to 5	BETX, RCRA Metals	CCDD evaluation in the vicinity of North Avenue
SP 3	7+10	3 to 5	BETX, RCRA Metals	RPTA #4 evaluation
SP 4	9+20	No Sample	No Sample	PID screening only for CCDD evaluation
SP 5	12+10	5 to 7	VOCs, PNAs, RCRA Metals, pH	RPTA #4 evaluation
SP 6	14+10	1 to 3	VOCs, PNAs, RCRA Metals	RPTA #3 evaluation
SP 7	17+90	3 to 5	VOCs, PNAs, RCRA Metals	RPTA #2 and #3 evaluation
SP 8	20+60	5 to 7	VOCs, PNAs, RCRA Metals	RPTA #2 evaluation
SP.9	23+50	7 to 9	BETX, RCRA Metals	RPTA #1 and #2 evaluation
SP 10	25+40	9 to 11	BETX, RCRA Metals	RPTA #1 evaluation

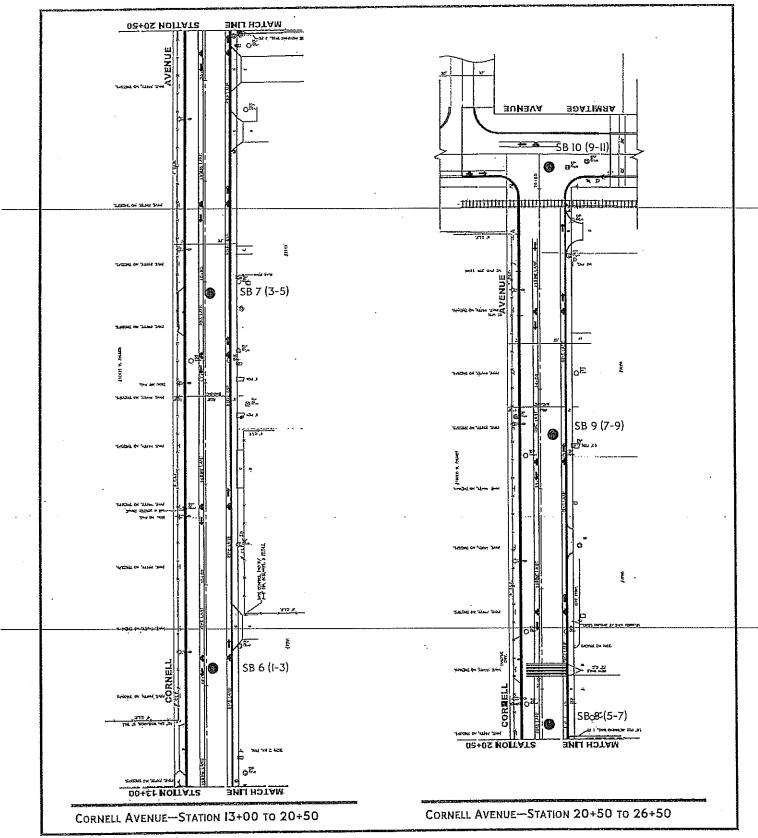
Figures 4 and 5 identify the locations of the borings advanced during this PSI.

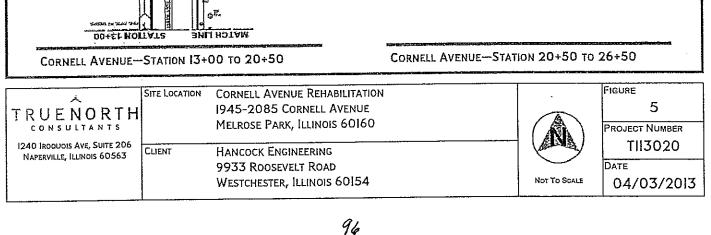
Field soil identification was used to construct soil boring logs. The geology identified during True North's limited PSI activities typically consisted of approximately one-half foot to one foot of surface materials inclusive of the asphalt pavement, concrete, and gravel. Surface materials were generally underlain by a dry silty clay which extended to the boring terminus at 15 feet below grade. Based on the soil borings locations, no water-bearing sand or gravel seams were noted.

No significant odors, staining, or other visible signs of contamination were observed in the soil borings. Soil boring logs from the limited PSI activities are presented in









TABLES

TABLE I

Summary of Soil Analytical Results - Preliminary Site investigation

Volatile Organic Compounds (VOCs)

CLIENT: Edwin Hancock Engineering Company

SITE: 1945-2085 Cornell Avenue, Melrose Park, Illinois 60160

SAMPLE DATE: March 13, 2013

LABORATORY: Prairie Analytical Systems, Inc.

MATRIX: Soil

PROJECT NUMBER: TII3020

				2					·	Analytical Met	hod: EPA Method	5035A/826
		過度度						經加亞的	是 自己是		SET 13	
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	1000				Part Con				22 C C C C C C C C C C C C C C C C C C	2 3 1 2 3 4		
	and the state of Section				医肾髓性炎					3007		
	V 2 44 2 5 1 2	1		MAN THE STATE	1 1 1 1 1 1 1 1 1 1 1 1 1		Marie tree	Military Samuel States				No.
Acetone	25	25	70,000	100,000	200,000	100,000	146000000000000000000000000000000000000	¢ 0,0398	< 0.0454	(D,D40D	₹0.0385	¢ D,0418
Benzene	0.03	0.17	12	8,0	2,300	2.2		€0,00398	< 0.00454	< 0.00400	¢ 0.00385	< 0.00418
Bromodichloromethane	0,6	0,6	10	3,000	2,000	3,000		r 0.00398	¢ 0.00454	₹0.00400	€0.00385	< 0.00418
Bromoform	0.8	0.8	8	53	16,000	140		< 0,00398	₹0.00454	<0.00400	¢ 0.00385	< 0.00418
Bromomethane	0.2	1.2	110	10	1,000	3.9		¢ 0.00796	∢ 0.00907	(0.00BDI	¢ 0.00770	¢ 0.00836
2-Butanone (MEX)	17	17	47,000	25,000	120,000	730	[6:3000]page:11	¢ 0.00796	¢ 0.00907	(0.0080)	< 0.00770	40.00836
Carbon disulfide	32	160	7,800	720	20,000	9		(0.00796	< 0.00907	(0.0080)	CD,00770	0.00836
Carbon tetrachiorida	0.07	0.33	5	0.3	410	0.9		¢ 0.00398	(0.00454	¢ 0.00400	< 0.00385	< 0.004IB
Chlorobenzene	t	6.5	1,600	130	4,100	1.3		(0.00398	¢ 0,00454	40.00400	(0.00385	< 0,004l8
Chloroethane	NE	NE	NE	1500	20,000	39		₹0.00796	₹ 0.00907	(0.0080I	₹0.00770	(0.00836
Chloroform	0.6	2.9	100	0.3	2,000	0.76		(0.00398	₹ 0.00454	< 0.00400	∢ 0,00385	¢ 0.004IB
Chloromethane	NE NE	NE	NE I	110	NE	5	尼黎縣 维约	₹ 0.00798	€ 0.00907	(D.DOSOI	(0.00770	(D.OO836
Dibromochloromethane	0.4	0.4	1,500	130	41,000	1,300	1200 F = 1	0.00398	¢ 0,00454	< 0,00400	€ 0.00385	¢ 0,004l8
l,I-Dichloroethane	23	IJD	7,800	1,300	200,000	130	F-4.484.5	∢D.00398	¢ 0.00454	(0.00400	¢ 0.00385	(0.0048
l,2-Dichloroethane	0,02	1.0	7	0.4	1,400	0.99		+ D,00398	₹ 0.00454	(0.00400	< 0.00385	(0.004)8
i,i-Dichioroethylene	0.06	0.3	3,900	29D	1,800	300		¢ 0,00398	₹ D.00454	(D.00400	< 0.00385	₹ D,004l8
cis-1,2-Dichloroethylene	0.4	LI	780	1,200	20,000	1,200		¢ 0.00398	< 0.00454	(D.00400	< 0.00385	€ 0.004[8
trans-1,2-Dichloroethylene	7.0	3.4	1,600	3,100	41,000	3,100	F44603855348	(0.00398	₹ 0.00454	₹ 0.00400	< 0.00385	¢ 0.00418
l,2-Dichloropropane	0.03	0.15	9	15	1,800	0,5	14/8/25/2015	(0.00398	¢ 0.00454	∢ D.00400	< 0.00385	€0.00418
tis-l,3-Dichioropropene	0.004	0.02	6.4	1.1	1,200	0.39		(0,00239	< 0.00272	(D.00240	∢ 0,0023	(D,0025)
trans-1,3-Dichloropropene	0.004	0.02	5.4	LI	1,200	0,39		(0.00239	¢ 0.00272	(0.00240	₹0.0023I	¢ 0,0025l
Ethylbenzene	13	19	7,800	400	20,000	58		₹0.00398	r 0,00454	¢ 0.00400	₹0,00385	< 0.0D4I8
2-Hexanone	0,16	0.16	390	450	720	1,000	医粉发 头	¢ D.00398	₹ 0.00454	₹0.00400	¢ 0.00385	< 0.00418
dethyl testiary-bulyl ether	0,32	0.32	780	8,800	2,000	140	SAME !	¢ 0,00398	₹ D.00454	+0.00400	< 0.00385	< 0.00418
4-Methyl-2-pentanone	2.5	2.5	6,300	3,100	NE	340	14600	(0.00398	¢ 0.00454	₹0,00400	< 0.00385	(0,004)8
dethylene chloride	0.02	0.2	85	13	12,000	34		< 0.00398	< D.00454	(0.0040D	(0.00385	(0.004)8
tyrene	4	18	16,000	1,500	41,000	430	11 Alexandre	¢ 0,00398	€ 0.00454	₹0.00400	< 0.00385	(0.0048
1,2,2-Tetrachloroethane	0.0035	0,0035	3.2	0.62	12,000	2,000	但的探察时代	¢ 0.00159	(0.00181	€0.00160	(0.0Di54	¢ 0,00l67
etrachloroethylene	0.05	0.3	12	13	2,400	28	77 BEACH	(0.00398	¢ 0,00454	(0,00400	< 0.00385	(0.004)8
oluene	12	29	16,000	650	410,000	42	DEWERS!	₹0.00398	(D.00454	(0.00400	(0.00385	< 0.004IB
I,I-Trichtoroethane	2	9.6	NE NE	[,200 ⁻	NE .	1,200	1988	¢ 0.00398	(0.00454	(0.00400	< D.00385	(0.004IB
I,2-Trichloroethane	0,02	0,3	310	1,800	8,200	1,800		(D.00398	(0.00454	< 0.00400	< D.00385	< 0.004IB
richloroethylene	0.05	0.3	58	5.	1,200	12	性的理學計	€0.00398	(0,00454	(0,00400	< 0.00385	< 0.00418
/inyl Chloride	0.01	0.07	0.46	0,28	170	1,1		(0,00434	(D.004l5	40.00380	< 0.00430	(0,00410
(ylenes (total)	150	150	16,000	320	410,000	320	THURSE.	(D,0119	¢ 0.0136	(0.0120	(O.OH5.	₹ 0.0l25

Notes:

Tier I Residential Soli Remediation Objective Values:

SCOG - Soil Component of the Groundwater Ingestion Exposure Route

ING – Ingestion Value INK – Inhalation Value

(= Analyte not detected (i.e. less than RL or MDL) All data reported in milligrams per kilogram (mg/kg) unless otherwise noted, NA = This constituent was not analyzed.

NE - No remediation objective established by the IEPA for this constituent.

Exposure Route Exceedences:

Bold/Shading Indicates an exceedance in the referenced criteria.

soil migration to groundwater exceedence

Ingestion exceedence

Inhalation exceedence

construction worker ingestion exceedence
 construction worker inhalation exceedence
 Cost exceedence

TRUENORTH

							1	TABLE 2						
		-		ns	Summary of		nalytlcal Res	Soll Analytical Results - Preliminary Site investigation	ary Site inve	tigation				
				Benzene, Tol	uene, Eth	ıyibenzı	ene, Xylenes	Benzene, Toluene, Ethylbenzene, Xylenes and Methyl-Tertlary Butyl Ether (BTEX/MTBE)	ırtlary Butyi	Ether (BTEX/I	мтве)			
CLIENT: SITE: PROJECT NUMBER:	Edwin H 1945-20 TII3020	1 Hancock 2085 Cori 20	: Enginee 'nell Aver	Edwin Hancock Engineering Company 1945-2085 Cornell Avenue, Meirose Park, lijinols 60160 Tii3020	c, ilmnols 60	0910				SAMPLE DATE: LABORATORY: MATRIX:	March 13, 2013 Prairie Analytical Systems, Inc. Soll	Systems, Inc.		
												inalytical Meth	Analytical Method: EPA Method 5035A/8260B	d 5035A/82601
			dential Still	Remediation of						Finding	Florielle	Alberta		
Conteminant of Content												建工工工	10.2	
				and the second										
Benzene	0.03		- 4	12	9.0		2,300	2.2		₹ 0.00403	< 0.00449	\$ < 0.00373	(0.00361	
Ethylbenzene	12	61	•	7,800	400		20,000	58		、0.00403	c 0.00449	¢ 0.00373	c 0.0036I	
Methyl-Tertlary Butyl Ether	0.32	52 0.32	32	780	8,800		2,000	140		g < 0.00403	¢ 0.00449	¢ 0.00373	(0.00361	
Toluene	12	29	6	16,000	650		410,000	42		ς 0.00403	c 0.00449	, < 0.00373	¢ 0.0036I	
Xylenes (total)	150	0 150	0	16,000	320		410,000	320	AT 所知 68 课	۶ د 0.012i	¢ 0.0l35	· 0.0112	¢ 0.0108	
Notes: Ther I Residential Soil Remediation Objective Values: SCOG - Soil Component of the Class II Groundwater Ingestion Exposure Route ING - Ingestion Value INH - Inhalation Value < = Analyte not detected (i.e. less than RL or MDL) All data reported in milligrams per kilogram (mg/kg) unless otherwise noted, NA = This constituent was not analyzed. NE = No remediation objective established by the IEPA for this constituent.	Objective s If Groun han RL or Klogram (zed, blished by	· Values: ndwater Ing · MDL) (mg/kg) un	gestion E.	xposure Route erwisc noted.						Exposure Route Exceed Boid/Shading Indicates a soil migration to groun b ingestion exceedence c inhaletton exceedence construction worker in construction worker in f C.at exceedence	Exposure Route Exceedences: Boid-Shading indicates an exceedance in the referenced criteria. Soil migration to groundwater exceedance Ingestion exceedence Construction worker inhalation exceedence Construction worker inhalation exceedence Context exceedence Context exceedence	redence cedence Cedenc	the referenced criteria. Co N S U LT A N T S	X N N N N N N N N N N N N N N N N N N N

							TABLE 3						
				Sumı	Summary of Soll A	knalyticai Re	Soll Analyticai Results - Preliminary Site Investigation	ary Site Investi	Igation				-
					Ројуп	ıclear Aromi	olynuclear Aromatic Hydrocarbons (PNAs)	ins (PNAs)					
CLIENT: SITE: PROJECT NUMBER:	Edwin Hano 1945-2085 Til3020	cock Englnee Cornell Ave	Edwin Hancock Engineering Company 1945-2085 Cornell Avenue, Meirose Park, Illinois 60160 Til3020	ark, Illino(s	09109				, 1 1, 2	SAMPLE DATE: LABORATORY: MATRIX:	March 13, 2013 Prairie Analytic Soil	March 13, 2013 Prairie Analytical Systems, Inc. Soll	
THE TOTAL STATE OF THE STATE OF	BITTER STATE	nilalisoti K	_(do ib)}elbeme				Sackgrunn Sackgrunn		(6-7) (19)	A (13) - (147) (1/6/19) (1	VALYTICAL METH	ANALYTICAL METHOD: EPA Method 3540C/827DC	13540C/8270C
	8	10	LINGS		ale:	HALL STATE							
Acenaphthene	570	2,900	ã	NE	120,000	NE	0.13		, 0,400	(0.402	77	(0.409	20 407
Acenaphthylene	85	420	2,300	벌	61,000	묏	70.0		ر 0.400	(0,402	(0.395	¢ 0.409	(0,407
Anthracene	12,000	59,000	23,000	¥ 2	000,019	빌	0.4		0,400	c 0,402	(0.395	¢ 0.409	(0.407
Benzo[b]fluoranthene	מוא	25	0.9	Z Z	0/1	2 2	1.8		0.400	(0.402	(0.395	(0.409	(0.407
Benzo[k]fluoranthene	49	250	6	쀨	1,700	Z	1.7		¢ 0,400	(0.402	0.395	0.409	0.407
Benzolg,h,l]perylene	27,000	130,000	2,300	NE NE	61,000	NE	1.7		د 0.400	c 0.402	(0.395	¢0,409	(0.407
Benzolalpyrene	8	82	0.09	W W	17	A E	2.1		12/0.0 >	ι 0.0724	ς 0.0712	₹0.0736	(0,0733
Chrysene	160	800	88	뿔	17,000	빌	2.7		ς 0.400	(0.402	د 0.395	ς 0.409	(0,407
Dipenzia, njantni acene	4 400	21 000	0.09 001 F	<u>u</u> 1	71		0.42		c 0.072I	< 0.0724	¢ 0.0712	(0.0736	د 0.0733
Fluorene	560	2,800	3,100	2 2	82,000	Z Z	4.0		¢ 0.400	0.402	0.395	0.409	c 0.407
Indeno[1,2,3-cd]pyrene	4	69	6.0	Ä	170	NE.	9.1		0.400	(0.402	0.395	00,409	,0407
Naphthalene	[2	8	1,600	170	4,100	6.1	0.2		< 0.400	(0.402	¢ 0.395	(0.409	(0.407
Phenanthrene	210	1,100	2,300	N. H.	61,000	Z.	2.5		د 0.400	(0.402	د 0.395	٥٥,409	د 0.407
Pyrene	4,200	21,000	2,300	岁	61,000	꾶	£	李紫松园 李紫	٥٥.400 ،	c 0.402	< 0.395	ς 0.409	ر 0,407
Notes: Ther I Industrial/Commercial Soil Remediation Objective Values:	l Remediation C	Objective Valu	(es;						Exposure Route Exceedences: Bold/Shading Indicates an exce	Exceadences:	Exposure Route Exceedences: Bold/Shading Indicates an exceedance in the referenced criteria.	ed criteria.	
SCOG - Soil Component of the Groundwater Ingestion Exposure Route	iroundwater Ing	gestion Expos	ure Route	•					* soil migration to groundwater exceedence	groundwater exc	eedence	,	
ING - Ingestion Value					٠				b ingestion exceedence	Sence			
All data reported in milligrams per kilogram (mg/kg) unless otherwise noted. < = Analyte not detected (i.e. less than RL or MDL)	oer kilogram (m _i s than RL or MD	g/kg) unless ()L)	otherwise noted,						inhaiation exceedence construction worker ingestion exceedence construction worker inhaiation exceedence	dence rker Ingestlon ext rker inhafatlon ex	ceedence ceedence		
NE = No remediation objective established by the IEPA for this constituent. NA = This constituent was not analyzed.	stablished by tl nalyzed.	he IEPA for th	als constituent.						^f C _{sat} exceedence			<	·
			-								F .	TRUENOR	RT T L
				-									

CLENT: Columnation Figure Company Co										TABLE 4					ŧ				
SAMPLE DATE: Pack of the fine of Engineering Company Sample Conservation Recovery Act (RCRA) Metals SAMPLE DATE: Pack of Council Avenue, Metans Park, Minoté GOLGO Pack of Council Avenue, Minoté GOLGO Pack of Coun		-				Suj	nmary of	Soll Anal	ytical Re	sults - Pi	reliminary	Site Invest	lgation						
STEE PLACE CORNING TO COLIENT: Flank Company PLACE CORNING TO COLOR PLACE CORNING TO C						***************************************	Resc	urce Con	ıservatlı	n Recove	ry Act (RC	RA) Metals							
PROJECT NUMBER: 113020 PROJECT NUMBER: 113		CLIENT:	Edwin Hanco	ick Englaee	ring Company	*					٠		SAM	PLE DATE:	March [3, 20];				
Analytical Martinet of Particles and Secretary Control of Control	PROJECT	SITE: NUMBER:	1945-2085 (T113020	Cornell Aver	nue, Melrose	Park, Illinois 60160							LAB	ORATORY: MATRIX:	Prairle Analyt Soil	ical Systems,	inc.		
The continue of the first of				:									4	nalytical Met	hod: EPA Met	had 9045C, 2	5050B/6020,	,90108/9014,	3060/7196
The constituted was not analyzed by the EAN of the constituent, was not analyzed by the EAN of the constituent, was not analyzed.	THE REAL PROPERTY.	A CONTRACTOR OF THE PARTY OF TH	Trestation of			非理学等的现在分									数は対対			ETC.CO.	
Constitution Cons																		を記して	
13 750 61 24,000 15 39 31 32 413 61 61 61 61 61 61 61																			
1							10000000000000000000000000000000000000	S. Prince					· · · · · · · · · · · · · · · · · · ·	建设设置			第一日の第	が見る。	
1							學也學		きが対	東安岩	CITATION	1			新加州市	が記れる	ELITATIVE.		STITLED
2,500 690,000 14,000 670,000 100	Hader of January	-	750	61	25.000	13		31	32	THE REAL PROPERTY.	12.5		⊒	32.3	6.39	12.5	10'8	7,55	6.49
March 180 20	Barlin	2 500	690.000	14.000	870,000	OII	1800	2100	H H		45.3	45.9	86.8	174	35.1	30,3	52.1	38,5	39.8
1,000 NE 1,0	Cadmium	BZ.	1.800	200	59,000	0.06	59	430	NE NE	316	619.0	0.535	0.792	0.967	0.557	0.747	0.523	0,500	0.563
100 NE 700 NE 36 107 1	Chromium Total	230	270	4,100	069	91	32	28	24	531 701 033	9.6	18.6	22.9	210	16	13.2	20.6	12.8	<u>9</u>
10	Cead	400	Z.	700	Z.	3.6	107	2	20		15.8	20.7	22.8	30.4	13.5	14.8	9.81	CO C	16.6
350 NE 1,000 NE 0.059 1.059 1.059 1.0559	Mercury	23	01	19	52,000	0.06	4,9	100	뜅		¢ 0.0897	c 0.0876	1010	(0.0959	0.0886	40.0958	0.0972	60.0859	CU.U923
Exposure Route Exceedences: Bold/Shading indicates an exceedence or therefore criteria. Ingestion exceedence or in the reference construction worker inhalation exceedence or the struction or the struction worker inhalation exceedence or the struction or the struction worker inhalation exceedence or the struction or th	Selenium	390	NE	1,000	Ä	0.48	3,3	2.4	8		0.578	0.547	0.030	0.683	40.554	6660	0.743	0.063	0/5/0/
Exposure Route Excede Bold/Shading indicates an 'ingestion exceedence 'ingestion exceedence 'Innalation exceedence 'Innalation exceedence 'construction worker ingo 'construction worker ingo 'd' construction worker ingo 'd' pH specific soil migration 'g' ph specific soil migration'	Silver	390	Ä	1,000	32	-	39	₽	N.	# W	(0.56	¢ 0.547	0.650	66cm ;	40000	6600	0000	10000	0.001
Ingestion exceedence binhalation exceedence construction worker ing denstruction worker ing fenstruction worker ing migration	Notes:	:	;	_										Exposure Roi Bold/Shading	ute Exceedenc Indicates an ex	est cceedance in th	ie raferenced c	riteria.	
h Inhalation exceedence construction worker ling. construction worker ling. deconstruction worker ling. deconstruction worker ling. ph specific soil migration.	Tier I Residential	Soll Remediati	on Ubjective va	alues:	4									Ingestion ex	ceedence				
construction worker ing. 4 construction worker inh. 9 pH specific soll migratio	SCOG - Soll Comp	sonent of the C	roundwater In	gestion expo	osure koure									b Inhalation e	хсееделсе				
4 construction worker Inh 4 pH specific soil migration .	ING - Ingestion V	a)tre												construction *	n worker Ingest	laj exceedend			
' pH specific soll migration	All data reported	rabue In milliorams c	er kloeram (m.	e/kg) unless	otherwise not	ted.								d construction	n worker Inhala	ıtlon exceeden	4		
	c - Analyte not de	tected (1.e. les	is than RL or MI	DT)	;									* pH specific	soll migration t	o groundwater i	exceedence		
	NE = No remedia	Jon objective t	stablished by t	the IEPA for	this constitue:	 שני													
TRUENORHH consolitanis	NA = This constite	dent was not a	naiyzed.				_										<		
CONSULTANTS															 		0 Z	L L	
																2 0 0	SULTAN	s <u>.</u> .	

APPENDIX C

Laboratory Data Sheets & Chain-of-Custody



Friday, March 22, 2013

Marjory McMahon

-True-North-Consultants-

1240 Iroquois Avenue, Suite 210

Naperville, IL 60563

TEL: (630) 717-2880

FAX: (630) 689-5881

RE: Cornell Ave: Armitage-North Ave.

PAS WO:

13C0344

Prairie Analytical Systems, Inc. received 9 sample(s) on 3/13/2013 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

This report shall not be reproduced, except in full, without the prior written consent of Prairie Analytical Systems, Inc.

If you have any questions, please feel free to contact me at (217) 753-1148.

Respectfully submitted,

Kristen A. Potter

Project Manager

Certifications:

NELAP/NELAC - IL #100323

^{1.217.753.1152} Fax

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344 Lab ID: 13C0344-01

Client Sample ID: Collection Date: SB 1 (7-9) 3/13/13 13:00

Collection Date. 3/13/13	15:00					*			
Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-	-MS								
*Acetone	U	0.0398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Benzene	U	0.00398		mg/Kg dry	I	3/18/13_10:46	3/18/13_19:41	SW-8260B Re-	_BDP
*Bromodichloromethane	บ	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Bromoform	ប	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Bromomethane	ប	0.00796		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*2-Butanone	U	0.00796		mg/Kg đry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Carbon disulfide	บ	0.00796		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Carbon tetrachloride	U	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Chlorobenzene	υ	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Chloroethane	U	0.00796		mg/Kg dry	. 1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Chloroform	ប	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Chloromethane	ប	0.00796		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Dibromochloromethane	U	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*1,1-Dichloroethane	ប	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*1,2-Dichloroethane	บ	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*1,1-Dichloroethene	U	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*cis-1,2-Dichloroethene	U	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*trans-1,2-Dichloroethene	บ	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*1,2-Dichloropropane	Ū	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*cis-1,3-Dichloropropene	U	0.00239		mg/Kg đry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*trans-1,3-Dichloropropene	U	0.00239		mg/Kg đry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Ethylbenzene	บ	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*2-Hexanone	บ	0.00398		mg/Kg đry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Methyl tert-butyl ether	Ū	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*4-Methyl-2-pentanone	ָט	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Methylene chloride	ū	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Styrene	Ü	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*1,1,2,2-Tetrachloroethane	ט	0.00159		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Tetrachloroethene	Ū	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Toluene	ซ	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*1,1,1-Trichloroethane		0.00398		mg/Kg dry		3/18/13 10:46	3/18/13 19:41	SW 8260B Re	
*1,1,2-Trichloroethane	U	0.00398		mg/Kg dry	I	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Trichloroethene	ប	0.00398		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
*Vinyl chloride	ΰ	0.00334		mg/Kg dry	1	3/19/13 9:05	3/19/13 17:43	SW 8260B Re	BDP
*Xylenes (total)	บ	0.0119		mg/Kg dry	1	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
• • •	v	66%	CI, I	75-12		3/19/13 9:05	3/19/13 17:43	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		87 %	U2, 2	75-12		3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene				75-12		3/19/13 9:05		SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		112%					3/19/13 17:43		
Surrogate: 1,2-Dichloroethane-d4		97%		75-11		3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
Surrogate: Toluene-d8		131 %	S2	78-11		3/19/13 9:05	3/19/13 17:43	SW 8260B Re	BDP
Surrogate: Toluene-d8		106 %		78-11	4	3/18/13 10:46	3/18/13 19:41	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by	y GC-MS								
*Acenaphthene	U	0.400		mg/Kg dry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Acenaphthylene	บ	0.400		mg/Kg dry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Anthracene	ប	0.400		mg/Kg dry	1 .	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Benzo(a)authracene	U	0.400		mg/Kg dry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Benzo(b)fluoranthene	ប	0.400		mg/Kg dry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Benzo(k)fluoranthene	U	0.400		mg/Kg dry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Client Sample ID:

SB I (7-9)

Lab ID: 13C0344-01

M

Collection Date: 3	3/13/13 13:00					Matrix: So	lid		
Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Benzo(g,h,i)perylene	U	0.400		mg/Kg dry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Benzo(a)pyrene	υ	0.0721		mg/Kg dry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Chrysene	U	0.400		mg/Kg dry	1	_3/19/13_10:38	3/21/13_1:01_	SW 8270C	JKA
*Dibenz(a,h)anthracene	ט	0.0721		mg/Kg dry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Fluoranthene	U	0.400		mg/Kg dry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Fluorene	U	0.400		mg/Kg dry	I	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Indeno(1,2,3-cd)pyrene	ប	0.400	,	mg/Kg dry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Naphthalene	U	0.400		mg/Kg đry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
*Phenanthrene	. υ	0.400		mg/Kg đry	1	3/19/13 10:38	3/21/13 I:01	SW 8270C	JKA
*Pyrene	U	0.400		mg/Kg dry	1	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
Surrogate: 2-Fluorobiphenyl		91 %		38-12	2	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
Surrogate: Nitrobenzene-d5		96%		45-13	36	3/19/13 10:38	3/21/13 1:01	SW 8270C	JKA
Surrogate: 4-Terphenyl-d14		88 %		64-13	I	3/19/13 10:38	3/21/13 1:01	SW 8270C	JK.A
Metals by ICP-MS									
*Mercury	ប	0.0897		mg/Kg đry	2	3/19/13 10:16	3/21/13 16:23	SW 6020A	JHN
*Selenium	0.578	0.561		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:23	SW 6020A	JHN
*Silver	U	0.561		mg/Kg đry	2	3/19/13 10:16	3/21/13 16:23	SW 6020A	JHN
Metals by ICP									
*Arsenic	12.5	0.561		mg/Kg đry	1	3/19/13 10:16	3/19/13 16:24	SW 6010B	JHN
*Barium	45.3	0.280		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:24	SW 6010B	JHN
*Cadmium	0.619	0.280		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:24	SW 6010B	JHN
*Chromium	19.6	0.280		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:24	SW 6010B	JHN
*Leяd	15.8	0.280		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:24	SW 6010B	JHIN
Conventional Chemistry Paran	meters								
Percent Solids	82.7	0.100		%	1	3/18/13 16:25	3/19/13 8:35	ASTM D2216	ILS

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Client Sample ID:

SB 2 (3-5)

Lab ID: 13C0344-02

Collection Date:

3/13/13 12:20

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS				•					
*Benzene	U	0.00403		mg/Kg dry	1	3/19/13 9:38	3/19/13 16:39	SW 8260B Re	BDP
*Ethylbenzene		0.00403		mg/Kg dry	<u>1</u>	3/19/13 9:38	3/19/ 13-16:39	SW-8260B-Re-	BDP
*Methyl tert-butyl ether	U	0.00403		mg/Kg dry	1	3/19/13 9:38	3/19/13 16:39	SW 8260B Re	BDP
*Toluene	υ	0.00403		mg/Kg đry	i	3/19/13 9:38	3/19/13 16:39	SW 8260B Re	BDP
*Xylenes (total)	U	0.0121		mg/Kg dry	1	3/19/13 9:38	3/19/13 16:39	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		95 %		75-12	0	3/19/13 9:38	3/19/13 16:39	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		103 %		75-11	9	3/19/13 9:38	3/19/13 16:39	SW 8260B Re	BDP
Surrogate: Toluene-d8		95 %		78-11	4	3/19/13 9:38	3/19/13 16:39	SW 8260B Re	BDP
Metals by ICP-MS									
*Mercury	U	0.0876		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:31	SW 6020A	JHN
*Selenium	U	0.547		mg/Kg đry	2	3/19/13 10:16	3/21/13 16:31	SW 6020A	JHN
*Silver	U	0.547		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:31	SW 6020A	THN
Metals by ICP									
*Arsenic	8.37	0.547		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:28	SW 6010B	JHN
*Barium	45.9	0.274		mg/Kg đry	1	3/19/13 10:16	3/19/13 16:28	SW 6010B	JHN
*Cadmium	0.535	0.274		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:28	SW 6010B	JHN
*Chromium	18.6	0.274		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:28	SW 6010B	JHN
*Lead	20.7	0.274		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:28	SW 6010B	JHN
Conventional Chemistry Parameters									
Percent Solids	83.2	0.100		%	1	3/18/13 16:25	3/19/13 8:35	ASTM D2216	ILS

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Client Sample ID: Collection Date: SB 3 (3-5) 3/13/13 13:40 Lab ID: 13C0344-03

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Benzene	U	0.00449		mg/Kg dry	1	3/19/13 9:38	3/19/13 17:09	SW 8260B Re	BDP
*Ethylbenzene	· · · · · · · · · · · · · · · · · ·	0.00449		mg/Kg dry	<u> </u>	3/19/13 9:38	3/19/13 17:09	SW 8260B Re	BDP -
*Methyl tert-butyl ether	U	0.00449		mg/Kg dry	1	3/19/13 9:38	3/19/13 17:09	SW 8260B Re	BDP
*Toluene	U	0.00449		mg/Kg dry	1	3/19/13 9:38	3/19/13 17:09	SW 8260B Re	BDP
*Xylenes (total)	U	0.0135		mg/Kg dry	1	3/19/13 9:38	3/19/13 17:09	SW 8260B Re	BDP
Surrogaie: 4-Bromofluorobenzene		102 %		75-12	0	3/19/13 9:38	3/19/13 17:09	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		104 %		75-11	9	3/19/13 9:38	3/19/13 17:09	SW 8260B Re	BDP
Surrogate: Toluene-d8		103 %		78-11-	4	3/19/13 9:38	3/19/13 17:09	SW 8260B Re	BDP
Metals by ICP-MS									
*Mercury	U	0.101		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:40	SW 6020A	JHN
*Selenium	U	0.630		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:40	SW 6020A	ЛHN
*Silver	U	0.630		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:40	SW 6020A	JHN
Metals by ICP									•
*Arsenic	11.1	0.630		mg/Kg đry	1	3/19/13 10:16	3/19/13 16:32	SW 6010B	JHN
*Barium	89.8	3.15		mg/Kg dry	10	3/19/13 10:16	3/19/13 17:38	SW 6010B	JHN
*Cadmium	0.792	0.315		mg/Kg đry	1	3/19/13 10:16	3/19/13 16:32	SW 6010B	JHN
*Chromium	22.9	0.315		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:32	SW 6010B	JHN
*Lead	22.8	0.315		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:32	SW 6010B	JHN
Conventional Chemistry Parameters				•					
Percent Solids	78.8	0.100		%	1	3/18/13 16:25	3/19/13 8:35	ASTM D2216	JLS

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

SB 5 (5-7)

Client Sample ID: Collection Date:

3/13/13 14:15

Lab Order: 13C0344

Lab ID: 13C0344-04

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Acetone	U	0.0454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Benzene	U	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Bromodichloromethane	U	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Bromoform	Ŭ	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Bromomethane	U	0.00907		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*2-Butanone	U	0.00907		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Carbon disulfide	บ	0.00907		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Carbon tetrachloride	U	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Chlorobenzene	U	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Chloroethane	U	0.00907		mg/Kg đry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Chloroform	υ	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Chloromethane	U	0.00907		mg/Kg đry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Dibromochloromethane	U	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*1,1-Dichloroethane	υ	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*1,2-Dichloroethane	Ū	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*1,1-Dichloroethene	ับ	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*cis-1,2-Dichloroethene	บ	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*trans-1,2-Dichloroethene	Ū.	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*1,2-Dichloropropane	υ	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*cis-1,3-Dichloropropene	บ	0.00272		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*trans-1,3-Dichloropropene	บ	0.00272		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Ethylbenzene	Ü	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*2-Hexanone	บ	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Methyl tert-butyl ether	υ	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*4-Methyl-2-pentanone	Ü	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Methylene chloride	บ	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*	U	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Styrene *1,1,2,2-Tetrachloroethane	U	0.00181		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Tetrachloroethene	บ	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
	U	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Toluene	U	0.00454 0:00454		mg/Kg dry	<u>1</u>	3/18/13 10:46	3/18/13-20:10	SW-8260B-Re-	
*1,1,1=Trickloroethane	U	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*1,1,2-Trichloroethane	Ū	0.00454		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Trichloroethene	บ	0.00434		mg/Kg dry	1	3/19/13 9:05	3/19/13 18:12	SW 8260B Re	BDP
*Vinyl chloride	U	0.00413		mg/Kg dry	1	3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
*Xylenes (total)	U		a	туку ту 75-12		3/19/13 9:05		SW 8260B Re	BDP
Surrogate: 4-Bromoftuorobenzene		58 %	CI, I	75-12 75-12		3/18/13 10:46	3/19/13 18:12 3/18/13 20:10	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		80%							
Surrogate: 1,2-Dichloroethane-d4		113 %		75-11		3/19/13 9:05	3/19/13 18:12	SW 8260B Re	BDP
Swrogate: 1,2-Dichloroethane-d4		100 %		75-11		3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
Surrogate: Toluene-d8		108 %		78-11		3/18/13 10:46	3/18/13 20:10	SW 8260B Re	BDP
Surrogate: Toluene-d8		142 %	\$2	78-11	4	3/19/13 9:05	3/19/13 18:12	SW 8260B Re	BDP
emi-Volatile Organic Compounds by GC-M	S								
*Acenaphthene	υ	0.402		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Acenaphthylene	U	0.402		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Anthracene	U	0.402		mg/Kg đry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Benzo(a)anthracene	υ	0.402		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Benzo(b)fiuoranthene	υ	0.402		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Benzo(k)fluoranthene	υ	0.402		mg/Kg đry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	ЈΚΑ

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Client Sample ID:

SB 5 (5-7)

Lab ID: 13C0344-04

Onone oumpro and	~ (, ,							0057101		
Collection Date: 3/	/13/13 14:15						Matrix: So	lid		
Analyses		Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Benzo(g,h,i)perylene		U	0.402		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Benzo(a)pyrene		U	0.0724		mg/Kg dry	I	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Chrysene		U	0.402		mg/Kg dry	1	3/49/13 -10:38	3/20/13 15:13	SW-8270C	JKA
*Dibenz(a,h)anthracene		ប	0.0724		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Fluoranthene		U	0.402		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Fluorene		U	0.402		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Indeno(1,2,3-cd)pyrene		U	0.402		mg/Kg dry	I	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Naphthalene		ប	0.402		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Phenanthrene		ש	0.402		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
*Pyrene		υ	0.402		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	ЈΚΑ
Swrogate: 2-Fluorobiphenyl			86 %		38-12.	2	3/19/13 10:38	3/20/13 15:13	SW 8270C	ЛКA
Surrogate: Nitrobenzene-d5			89 %		45-13	б	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
Surrogate: 4-Terphenyl-d14			98 %		64-13	1	3/19/13 10:38	3/20/13 15:13	SW 8270C	JKA
Metals by ICP-MS										•
*Mercury		U	0.0959		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:48	SW 6020A	JHN
*Selenium		0.683	0.599		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:48	SW 6020A	JHN
*Silver		υ	0.599		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:48	SW 6020A	JHN
Metals by ICP										
*Arsenic		32.3	0.599		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:36	SW 6010B	JHN
*Barium		174	3.00		mg/Kg dry	10	3/19/13 10:16	3/19/13 17:42	SW 6010B	JHN
*Cadmium		0.967	0.300		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:36	SW 6010B	JHN
*Chromium		21.0	0.300		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:36	SW 6010B	JHN
*Lead .		30.4	0.300		mg/Kg dry	1 -	3/19/13 10:16	3/19/13 16:36	SW 6010B	JHN
Conventional Chemistry Paran	neters									
Percent Solids	•	80.9	0.100		%	1	3/18/13 16:25	3/19/13 8:35	ASTM D2216	ЛLS

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Client Sample ID: Collection Date: SB 6 (1-3) 3/13/13 15:00 Lab ID: 13C0344-05

Matrix:	Solid
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Analyses	Result	Limit	Qual Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS								
*Acetone	U	0.0400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Benzene	u	_0.00400_	mg/Kg dry	11	3/18/13 10:46	3/18/13_20:40_	. SW_8260B.Re.	BDP.
*Bromodichloromethane	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Bromoform	υ	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Bromomethane	U	0.00801	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*2-Butanone	· U	0.00801	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Carbon disulfide	U	0.00801	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Carbon tetrachloride	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Chlorobenzene	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Chloroethane	บ	0.00801	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Chloroform	υ	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Chloromethane	Ü	0.00801	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Dibromochloromethane	ប	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*1,1-Dichloroethane	U	0.00400	mg/Kg dry	· I	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*1,2-Dichloroethane	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*1,1-Dichloroethene	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*cis-1,2-Dichloroethene	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*trans-1,2-Dichloroethene	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*1,2-Dichloropropane	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*cis-1,3-Dichloropropene	U	0.00240	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*trans-1,3-Dichloropropene	U	0.00240	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Ethylbenzene	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*2-Hexanone	υ	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Methyl tert-butyl ether	บ	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*4-Methyl-2-pentanone	ΰ	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Methylene chloride	υ	0.00400	mg/Kg dry	I	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Styrene	U	0.00400	mg/Kg dry	I	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*1,1,2,2-Tetrachloroethane	U	0.00160	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Tetrachloroethene	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Toluene	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*1,1,1-Trichloroethane		0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40		BDP
*1,1,2-Trichloroethane	U	0.00400	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Trichloroethene	υ	0.00400	mg/Kg đry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
*Vinyl chloride	U	0.00380	mg/Kg dry	1	3/19/13 9:05	3/19/13 18:42	SW 8260B Re	BDP
*Xylenes (total)	υ	0.0120	mg/Kg dry	1	3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		86 %	75-1		3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		87 %	75-1		3/19/13 9:05	3/19/13 18:42	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		93 %	75-1		3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
Storogate: 1,2-Dichloroethane-d4		115 %	75-1		3/19/13 9:05	3/19/13 18:42	SW 8260B Re	BDP
Surrogate: Toluene-d8		105 %	78-1		3/18/13 10:46	3/18/13 20:40	SW 8260B Re	BDP
Surrogate: Toluene-d8		100 %	78-1		3/19/13 9:05			
Surrogaie: 10iuene-uo		100 /8	,	17	3/13/13 9:03	3/19/13 18:42	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by GC-M	íS							
*Acenaphthene	U	0.395	mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Acenaphthylene	U	0.395	mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Anthracene	U	0.395	mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Benzo(a)anthracene	U	0.395	mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Benzo(b)fluoranthene	ប	0.395	mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Benzo(k)fluoranthene	บ	0.395	mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA

LABORATORY RESULTS .

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

SB 6 (1-3)

Client Sample ID: Collection Date:

3/13/13 15:00

Lab Order: 13C0344

Lab ID: 13C0344-05

Concetton Dates 3/13	715 15.00								
Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Benzo(g,h,i)perylene	υ	0,395		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Benzo(a)pyrene	υ	0.0712		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Chrysene	U	0.395		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Dibenz(a,h)anthracene	U	0.0712		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Fluoranthene	Ŭ	0.395		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Fluorene	U	0.395		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	ЈΚΑ
*Indeno(1,2,3-cd)pyrene	U	0.395	•	mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Naphthalene	U	0.395		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Phenanthrene	U	0.395		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
*Pyrene .	U	0.395		mg/Kg dry	1	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
Surrogate: 2-Fluorobiphenyl		87 %		38-12	2	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
Surrogate: Nitrobenzene-d5		86 %		45-13	6	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
Surrogate: 4-Terphenyl-d14		101 %		64-13	II.	3/19/13 10:38	3/20/13 15:44	SW 8270C	JKA
Metals by ICP-MS									
*Mercury	U	0.0886		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:56	SW 6020A	JHN
*Selenium	U	0.554		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:56	SW 6020A	JHN
*Silver	υ	0.554		mg/Kg dry	2	3/19/13 10:16	3/21/13 16:56	SW 6020A	JHN
Metals by ICP									
*Arsenic	9.39	0.554		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:39	SW 6010B	JHN
*Barium	35.1	0.277		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:39	SW 6010B	JHN
*Cadmium	0.557	0.277		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:39	SW 6010B	JHN
*Chromium	19.1	0.277		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:39	SW 6010B	JHN
*Lead	13.5	0.277		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:39	SW 6010B	JHN
Conventional Chemistry Parameter	ters								
Percent Solids	84.2	0.100		%	1	3/18/13 16:25	3/19/13 8:35	ASTM D2216	JLS

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Client Sample ID: Collection Date: SB 7 (3-5) 3/13/13 11:00 Lab ID: 13C0344-06

Conceion Date.	13/13 11.00								
Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds b	y GC-MS								
*Acetone	U	0.0385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
- *Benzene	U	0.00385		mg/Kg-dry	1	3/18/1310:46	3/18/13 21:10	_SW-8260B Re-	BDP
*Bromodichloromethane	U	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Bromoform	U	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Bromomethane	Ū	0.00770		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*2-Butanone	υ	0.00770		mg/Kg đry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Carbon disulfide	U	0.00770		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Carbon tetrachloride	U	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Chlorobenzene	บ	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Chloroethane	U	0.00770		mg/Kg diy	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Chloroform	U	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Chloromethane	U	0.00770		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Dibromochloromethane	υ	0.00385		mg/Kg dry	1	3/18/13 10:46	. 3/18/13 21:10	SW 8260B Re	BDP
*I,1-Dichloroethane	υ	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*1,2-Dichloroethane	U	0,00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*1,1-Dichloroethene	Ū	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*cis-1,2-Dichloroethene	Ü	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*trans-1,2-Dichloroethene	Ū	0.00385		mg/Kg dry	ī	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*1,2-Dichloropropane	บ	0.00385		mg/Kg dry	I	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*cis-1,3-Dichloropropene	. Ü	0.00231		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*trans-1,3-Dichloropropene	Ü	0.00231		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Ethylbenzene	บ	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*2-Hexanone	Ü	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Methyl tert-butyl ether	ט	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*4-Methyl-2-pentanone	ט	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Methylene chloride	บ	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Styrene	υ	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*1,1,2,2-Tetrachloroethane	ט	0.00363		mg/Kg dry	ī	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Tetrachloroethene	บ	0.00154		mg/Kg dry	I	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Toluene	ט	0.00385		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*1,1,1-Trichloroethane	Ü	0.00385		mg/Kg dry	- 1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
, -	n G	0.00385	•	mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*1,1,2-Trichloroethane . *Trichloroethene	U	0.00385		mg/Kg dry	l	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
	บ	0.00383		mg/Kg dry	1	3/19/13 9:05	3/19/13 19:11	SW 8260B Re	BDP
*Vinyl chloride	U	0.00430		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
*Xylenes (total)	U	70 %	CI, I	75-12		3/19/13 9:05	3/19/13 19:11	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		70 % 78 %	C1, 1	75-12		3/18/13 10:46		SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene							3/18/13 21:10		
Surrogate: 1,2-Dichloroethane-d4		95 %		75-11		3/18/13 10:46	3/18/13 21:10	SW 8260B Re	
Surrogate: 1,2-Dichloroethane-d4		113 %		75-11		3/19/13 9:05	3/19/13 19:11	SW 8260B Re	BDP
Surrogate: Toluene-d8		106 %		78-11		3/18/13 10:46	3/18/13 21:10	SW 8260B Re	BDP
Surrogate: Toluene-d8		118 %	S2	78-11	4	3/19/13 9:05	3/19/13 19:11	SW 8260B Re	BDP
emi-Volatile Organic Compou	nds by GC-MS								
*Acenaphthene	Ŭ	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	. SW 8270C	JKA
*Acenaphthylene	U	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
*Anthracene	U	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
*Benzo(a)anthracene	Ü	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
*Benzo(b)fluoranthene	U	0.409		mg/Kg đry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
*Benzo(k)fluoranthene	Ŭ	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Client Sample ID:

Lab ID: 13C0344-06

SB 7 (3-5)

Chemi bampic 10.	, (3 3)					2-2227 13.	C05 11-00		
Collection Date:	3/13/13 11:00					Matrix: Sol	lid		
Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Benzo(g,h,i)perylene	U	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
*Benzo(a)pyrene	บ	0.0736		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
*Chrysene				mg/Kg dry	-I	3/19/13 - 10:38	3/20/1316:15-	-SW-8270C	JKA
*Dibenz(a,b)anthracene	Ŭ	0.0736		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	ЈΚΑ
*Fluoranthene	บ	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA.
*Fluorene	U	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
*Indeno(1,2,3-cd)pyrene	υ	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	ЛΚΑ
*Naphthalene	U	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
*Phenanthrene	U	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
*Ругепе	U	0.409		mg/Kg dry	1	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
Surrogate: 2-Fluorobiphenyl		82 %		38-12	2	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
Surrogate: Nitrobenzene-d5		86 %		45-13	б	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA.
Surrogate: 4-Terphenyl-d14		95 %		64-13	<i>I</i> .	3/19/13 10:38	3/20/13 16:15	SW 8270C	JKA
Metals by ICP-MS									
*Mercury	ប	0.0958		mg/Kg dry	2	3/19/13 10:16	3/21/13 17:04	SW 6020A	JHN
*Selenium	ប	0.599		mg/Kg dry	2	3/19/13 10:16	3/21/13 17:04	SW 6020A	JHN
*Silver	U	0.599		mg/Kg dry	2	3/19/13 10:16	3/21/13 17:04	SW 6020A	JHN
Metals by ICP									
*Arsenic	12.5	0.599		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:43	SW 6010B	JHN
*Barium	30.3	0.299		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:43	SW 6010B	JHN
*Cadmium	0.747	0.299		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:43	SW 6010B	JHN
*Chromium	13.2	0.299		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:43	SW 6010B	JHN
*Lead	14.8	0.299		mg/Kg dry	1 .	3/19/13 10:16	3/19/13 16:43	SW 6010B	JHN
Conventional Chemistry Para	meters								
Percent Solids	81.0	0.100		%	1	3/18/13 16:25	3/19/13 8:35	ASTM D2216	ЛS

LABORATORY RESULTS

Client:

True North Consultants

Project: Client Sample ID:

Collection Date:

Cornell Ave: Armitage-North Ave.

SB 8 (5-7)

3/13/13 9:15

Lab Order: 13C0344

Lab ID: 13C0344-07 Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Acetone	U	0.0418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Benzene	U	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Bromodichloromethane	บ	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Bromoform	U	0.00418		mg/Kg dry	I	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Bromomethane	U	0.00836		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*2-Butanone	U	0.00836		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Carbon disulfide	บ	0.00836		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Carbon tetrachloride	U	0.00418		mg/Kg đry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Chlorobenzene	บ	0.00418		mg/Kg dry	1.	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Chloroethane	U	0.00836		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Chloroform	U	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP.
*Chloromethane	ប	0.00836		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Dibromochloromethane	Ŭ	0.00418		mg/Kg đry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*1,1-Dichloroethane	บ	0.00418		mg/Kg đry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*1,2-Dichloroethane	บ	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*1,1-Dichloroethene	U	0.00418		mg/Kg dry	1	3/18/13 10:46 -	3/18/13 21:39	SW 8260B Re	BDP
*cis-1,2-Dichloroethene	U	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*trans-1,2-Dichloroethene	U	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*1,2-Dichloropropane	U	0.00418		mg/Kg đry	ı.	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*cis-1,3-Dichloropropene	U	0.00251		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*trans-1,3-Dichloropropene	υ	0.00251		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Ethylbenzene	υ	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*2-Hexanone	U	0.00418		mg/Kg đry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Methyl tert-butyl ether	U	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*4-Methyl-2-pentanone	U	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Methylene chloride	บ	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Styrene	U	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*1,1,2,2-Tetrachloroethane	υ	0.00167		mg/Kg đry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Tetrachloroethene	ប	0.00418		mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Toluene	U	0.00418		mg/Kg đry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*1,1,1-Trichloroethane	U	0.00418		—mg/Kg-dry—	_1	3/18/13_10:46	<u> 3/18/13-21:39</u>	-SW-8260B-Re-	—BDP——
*1,1,2-Trichloroethane	U	0.00418		· mg/Kg dry	1	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Trichloroethene	ប	0.00418		mg/Kg dry	· I	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
*Vinyl chloride	U	0.00410	•	mg/Kg dry	1	3/19/13 9:05	3/19/13 19:41	SW 8260B Re	BDP
*Xylenes (total)	U	0.0125		mg/Kg dry	I	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		77 %		75-120)	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		65 %	CI, I	75-120)	3/19/13 9:05	3/19/13 19:41	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		113 %		75-119) .	3/19/13 9:05	3/19/13 19:41	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		95 %		75-119	7	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
Surrogate: Toluene-d8		128 %	S2	78-114	f	3/19/13 9:05	3/19/13 19:41	SW 8260B Re	BDP
Surrogate: Toluene-d8		103 %		78-114	f	3/18/13 10:46	3/18/13 21:39	SW 8260B Re	BDP
Semi-Volatile Organic Compounds by GC-N	1S								
*Acenaphthene	ับ	0.407		mg/Kg dry	1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA
*Accaphthylene	ŭ	0.407		mg/Kg dry	1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA
*Anthracene	บ	0.407		mg/Kg dry	1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA
*Benzo(a)anthracene	Ū	0.407		mg/Kg đry	1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA
*Benzo(b)fluoranthene	υ	0.407		mg/Kg dry	1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA JKA
*Benzo(k)fluoranthene	บ	0.407		mg/Kg dry	1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344 Lab ID: 13C0344-07

Client Sample ID: Collection Date: SB 8 (5-7) 3/13/13 9:15

J/13/	15 5.15										
Analyses	Result	Limit	Qual Units	DF	Date Prepared	Date Analyzed	Method	Analyst			
*Benzo(g,h,i)perylene	· U	0.407	mg/Kg đ	y 1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA			
*Benzo(a)pyrene	U	0.0733	mg/Kg d	y 1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA			
*Chrysene	ָ ָ ָ ַ ַ ַ	0.407	mg/Kg d	у 1	3/19/13 10:38	3/20/13 0:29	SW 8270C	_JKA			
*Dibenz(a,h)anthracene	บ	0.0733	mg/Kg di	y I	3/19/13 10:38	3/20/13 0:29	SW 8270C	ЛΚА			
*Fluoranthene	U	0.407	mg/Kg di	y 1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA			
*Fluorene	υ	0.407	mg/Kg d	y 1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA			
*Indeno(1,2,3-cd)pyrene	ប	0.407	mg/Kg di	y l	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA			
*Naphthalene	ប	0.407	mg/Kg đ	y 1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA			
*Phenanthrene	ប	0:407	mg/Kg di	y 1	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA			
*Ругепе	ΰ	0.407	ту/Кд ф	y 1	. 3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA			
Surrogate: 2-Fluorobiphenyl		87 %	38	3-122	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA			
Surrogate: Nitrobenzene-d5		96 %	4.	-136	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA			
Surrogate: 4-Terphenyl-d14		96 %	6-	<i>L-131</i>	3/19/13 10:38	3/20/13 0:29	SW 8270C	JKA			
Metals by ICP-MS											
*Mercury	U	0.0972	mg/Kg di	y 2	3/19/13 10:16	3/21/13 17:13	SW 6020A	JHN			
*Selenium	0.743	0.608	mg/Kg di	у 2	3/19/13 10:16	3/21/13 17:13	SW 6020A	JHN			
*Silver	Ŭ	0.608	mg/Kg di	y 2	3/19/13 10:16	3/21/13 17:13	SW 6020A	JHIN			
Metals by ICP			•								
*Arsenic	8.01	0.608	mg/Kg di	y 1	3/19/13 10:16	3/19/13 16:47	SW 6010B	JHN			
*Barium	52.1	0.304	mg/Kg di	y 1	3/19/13 10:16	3/19/13 16:47	SW 6010B	JHN			
*Cadmium	0.523	0.304	mg/Kg di	y l	3/19/13 10:16	3/19/13 16:47	SW 6010B	JHN			
*Chromium	20.6	0.304	mg/Kg di	y 1	3/19/13 10:16	3/19/13 16:47	SW 6010B	JHN			
*Lead	9.81	0.304	mg/Kg di	y 1	3/19/13 10:16	3/19/13 16:47	SW 6010B	JHN			
Conventional Chemistry Paramete	ers										
Percent Solids	81.2	0.100	%	. 1	3/19/13 13:57	3/20/13 8:35	ASTM D2216	ЛS			

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Client Sample ID:

SB 9 (7-9)

Lab ID: 13C0344-08

CACAL CLARPID ALL		- (
Collection Date:	3/13	3/1

3/13/13 9:45

Matrix:	Solid
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Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Benzene	U	0.00373		mg/Kg dry	1	3/19/13 9:38	3/19/13 17:38	SW 8260B Re	BDP
*Ethylbenzene	. ប .	0.00373		mg/Kg dry	1	3/19/13, 9:38	3/19/13 17:38	SW 8260B Re	BDP
*Methyl tert-butyl ether	U	0.00373		mg/Kg dry	1	3/19/13 9:38	3/19/13 17:38	SW 8260B Re	BDP
*Tolnene	υ	0.00373		mg/Kg dry	1	3/19/13 9:38	3/19/13 17:38	SW 8260B Re	BDP
*Xylenes (total)	U	0.0112		mg/Kg dry	1	3/19/13 9:38	3/19/13 17:38	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		81 %		75-12	0	3/19/13 9:38	3/19/13 17:38	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		100 %		75-11.	9	3/19/13 9:38	3/19/13 17:38	SW 8260B Re	BDP
Surrogate: Toluene-d8		126 %	<i>\$</i> 2	78-11	4	3/19/13 9:38	3/19/13 17:38	SW 8260B Re	BDP
Metals by ICP-MS									
*Mercury	U	0.0859		mg/Kg dry	2	3/19/13 10:16	3/21/13 17:21	SW 6020A	JHN
*Selenium	0.623	0.537		mg/Kg đry	2	3/19/13 10:16	3/21/13 17:21	SW 6020A	JHN
*Silver	U	0.537		mg/Kg dry	2 .	3/19/13 10:16	3/21/13 17:21	SW 6020A	JHN
Metals by ICP									
*Arsenic	7.55	0.537		mg/Kg dry	I	3/19/13 10:16	3/19/13 16:51	SW 6010B	JHN
*Barium	38.5	0.269		mg/Kg đry	1	3/19/13 10:16	3/19/13 16:51	SW 6010B	JHN
*Cadmium	0.500	0.269		mg/Kg đry	1	3/19/13 10:16	3/19/13 16:51	SW 6010B	JHN
*Chromium	12.8	0.269		mg/Kg đry	1	3/19/13 10:16	3/19/13 16:51	SW 6010B	JHN
*Lead	10.1	0.269		mg/Kg dry	1	3/19/13 10:16	3/19/13 16:51	SW 6010B	THM
Conventional Chemistry Parameters									
Percent Solids	86.4	0.100		%	1	3/19/13 13:57	3/20/13 8:35	ASTM D2216	ILS

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Client Sample ID:

SB 10 (9-11)

Lab ID: 13C0344-09

Collection Date:

3/13/13 10:25

Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Benzene	U	0.00361		mg/Kg dry	1	3/20/13 11:15	3/21/13 12:28	SW 8260B Re	BDP
*Ethylbenzene	···U	0.00361 -		mg/Kg dry	1.	3/20/13 11:15	3/21/13 12:28	SW 8260B Re-	BDP
*Methyl tert-butyl ether	Ŭ	0.00361		mg/Kg đry	1	3/20/13 11:15	3/21/13 12:28	SW 8260B Re	BDP
*Toluene	U	0.00361		mg/Kg dry	1	3/20/13 11:15	3/21/13 12:28	SW 8260B Re	BDP
*Xylenes (total)	U	0.0108		mg/Kg đry	1	3/20/13 11:15	3/21/13 12:28	SW 8260B Re	BDP
Surrogate: 4-Bromofluorobenzene		77 %		75-12	0	3/20/13 11:15	3/21/13 12:28	SW 8260B Re	BDP
Surrogate: 1,2-Dichloroethane-d4		94 %		75-11	9	3/20/13 11:15	3/21/13 12:28	SW 8260B Re	BDP
Surrogate: Toluene-d8		142 %	S2	78-11	4.	3/20/13 11:15	3/21/13 12:28	SW 8260B Re	BDP
Metals by ICP-MS									
*Mercury	ប	0.0925		mg/Kg dry	2	3/19/13 10:16	3/21/13 17:29	SW 6020A	JHN
*Selenium	U	0.578		mg/Kg dry	2	3/19/13 10:16	3/21/13 17:29	SW 6020A	JEN
*Silver	υ	0.578		mg/Kg dry	2	3/19/13 10:16	3/21/13 17:29	SW 6020A	JHN
Metals by ICP									
*Arsenic	6.49	. 0.578		mg/Kg dry	1	3/19/13 10:16	3/19/13 17:11	SW 6010B	MIN
*Barium	39.8	0.289		mg/Kg đry	1	3/19/13 10:16	3/19/13 17:11	SW 6010B	ЛHN
*Cadmium	0.563	0.289		mg/Kg dry	1	3/19/13 10:16	3/19/13 17:11	SW 6010B	JHN
*Chromium	16.1	0.289		mg/Kg dry	1	3/19/13 10:16	3/19/13 17:11	SW 6010B	JHN
*Lead ·	9.91	0.289		mg/Kg dry	1	3/19/13 10:16	3/19/13 17:11	SW 6010B	JHN
Conventional Chemistry Parameters									
Percent Solids	85.3	0.100		%	1	3/19/13 13:57	3/20/13 8:35	ASTM D2216	JLS

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

%REC

RPD

Volatile Organic Compounds by GC-MS - Quality Control

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch W001332 - SW 5035A VOA	· · · - ,		: =							
Blank (W001332-BLK1)				Prepared &	Analyzed:	03/18/2013	}			
Acetone	U	0.0500	mg/Kg wet							
Benzene	U	0.00500	mg/Kg wet							
Bromodichloromethane	υ	0.00500	mg/Kg wet							
Bromoform	υ	0.00500	mg/Kg wet							
Bromomethane	Ŭ	0.0100	mg/Kg wet							
-Butanone	U	0.0100	mg/Kg wet							
Carbon disulfide	U	0.0100	mg/Kg wet							
Carbon tetrachloride	U	0.00500	mg/Kg wet							
Chlorobenzene	υ	0,00500	mg/Kg wet							
hloroethane	U	0.0100	mg/Kg wet							
Chloroform	υ	0.00500	mg/Kg wet							
Chloromethane	Ŭ	0.0100	mg/Kg wet					•		
ibromochloromethane	U	0.00500	mg/Kg wet							
1-Dichloroethane	U	0.00500	mg/Kg wet							
,2-Dichloroethane	υ	0.00500	mg/Kg wet							
,I-Dichloroethene	U	0.00500	mg/Kg wet							
is-1,2-Dichloroethene	ប	0.00500	mg/Kg wet							
ans-1,2-Dichloroethene	υ	0.00500	mg/Kg wet							
,2-Dichloropropane	U	0.00500	mg/Kg wet							
is-1,3-Dichloropropene	U	0.00300	mg/Kg wet							
ans-1,3-Dichloropropene	U	0.00300	mg/Kg wet							
thylbenzene	υ	0.00500	mg/Kg wet							
Нехапове	Ŭ	0.00500	mg/Kg wet							
fethyl tert-butyl ether	Ū	0.00500	mg/Kg wet							
-Methyl-2-pentanone	υ	0.00500	mg/Kg wet							
fethylene chloride	Ŭ	-0.00500	mg/Kg wet				···	~~		
tyrene	υ	0.00500	mg/Kg wet							
1,2,2-Tetrachloroethane	ប	0.00200	mg/Kg wet							
etrachloroethene	υ	0.00500	mg/Kg wet							
oluene	ប	0.00500	mg/Kg wet							
1,1-Trichloroethane	ΰ	0,00500	mg/Kg wet							
1,2-Trichloroethane	υ	0.00500	mg/Kg wet							
richloroethene	υ	0.00500	mg/Kg wet							
inyl chloride	ΰ	0.00500	mg/Kg wet							
ylenes (total)	U	0.0150	mg/Kg wet							
urrogate: 4-Bromofluorobenzene	0.0500		mg/Kg wet	0.050000		100	75-120			
urrogate: 1,2-Dichloroethane-d4	0.0463		mg/Kg wet	0.050000		93	75-119			
urrogate: Toluene-d8	0.0518		mg/Kg wet	0.050000		104	78-114			

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Analyte	Resalt	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
			020	20101		,,,,,,,,,	~~~~			110103
Batch W001332 - SW 5035A VOA		**								
LCS (W001332-BS1)				Prepared &	Analyzed:	03/18/2013	3			
Benzene	0.0528	0.00500	mg/Kg wet	0.050000		106	80-130			
Chlorobenzene	0.0501	0.00500	mg/Kg wet	0.050000		100	85-120			
1,1-Dichloroethene	0.0520	0.00500	mg/Kg wet	0.050000		104	70-130			
Ethylbenzene	0.0500	0.00500	mg/Kg wet	0.050000		100	77-132			
Toluene	0.0526	. 0.00500	mg/Kg wet	0.050000		105	80-130			
Trichloroethene	0.0529	0.00500	mg/Kg wet	0.050000		106	75-130			
Xylenes (total)	0.150	0.0150	mg/Kg wet	0.15000		100	80-130			
Surrogate: 4-Bromofluorobenzene	0.0489	····	mg/Kg wet	0.050000		98	75-120			
Surrogate: 1,2-Dichloroethane-d4	0.0458		mg/Kg wet	0.050000		92	75-119			
lurrogate: Toluene-d8	0.0508		mg/Kg wet	0.050000		102	78-114		•	
Matrix Spike (W001332-MS1)	Sou	rce: 13C0324	L-01	Prepared &	Analyzed:	03/18/2013	3			
Benzene	0.0631	0.00680	mg/Kg dry	0.067966	ND	93	50-140			
Chlorobenzene	0.0565	0.00680	mg/Kg dry	0.067966	ND	83	60-130			
,1-Dichloroethene	0.0547	0.00680	mg/Kg dry	0.067966	ND	81	60-130			
Ethylbenzene	0.0552	0.00680	mg/Kg dry	0.067966	ND	81	50-140			
Coluene	0.0613	0.00680	mg/Kg dry	0.067966	0.00602	81	55-130			
Prichloroethene	0.0636	0.00680	mg/Kg dry	0.067966	ND	94	60-130			
Kylenes (total)	0.156	0.0204	mg/Kg dry	0.20390	ND	76	60-130			
Surrogate: 4-Bromofluorobenzene	0.0593	·········	mg/Kg dry	0.067966		87	75-120			
urrogate: 1,2-Dichloroethane-d4	0.0597		mg/Kg dry	0.067966		88	75-119			
lurrogate: Toluene-d8	0.0683		mg/Kg dry	0,067966		100.	78-114			
Matrix Spike Dup (W001332-MSD1)	Sou	rce: 13C0324	-01	Prepared &	Analyzed:	03/18/2013	3			
Senzene .	0.0568	0.00650	mg/Kg dry	0.064998	ND	87	50-140	11	20	
Chlorobenzene	0.0536	0.00650	mg/Kg dry	0.064998	ND	82	60-130	5	20	
,1-Dichloroethene	0.0463	0.00650	mg/Kg dry	0.064998	ND	71-	60-130	17	20	
Ethylbenzene	0.0511	0.00650	mg/Kg dry	0.064998	ND	79	50-140	8	25	
oluene	0.0574	0.00650	mg/Kg dry	0.064998	0.00602	79	55-130	7	25	
Trichloroethene	0.0564	0.00650	mg/Kg dry	0.064998	ND	87	60-130	12	20	
Kylenes (total)	0.145	0.0195	mg/Kg dry	0.19499	ND	75	60-130	7	25	
Surrogate: 4-Bromofluorobenzene	0.0543		mg/Kg dry	0.064998		84	75-120			
Surrogate: 1,2-Dichloroethane-d4	0.0564		mg/Kg dry	0.064998		87	75-119			
Surrogate: Toluene-d8	0.0664		mg/Kg dry	0.064998		102	78-114			

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch W001367 - SW 5035A VOA			•							
Blank (W001367-BLK1)				Prepared &	Analyzed:	03/19/2013	<u> </u>			
Benzene	U	0.00500	mg/Kg wet							
Ethylbenzene	ซ	0.00500	mg/Kg wet							
Methyl tert-butyl ether	ט	0.00137	mg/Kg wet							М
Toluene	Ŭ	0.00500	mg/Kg wet							
Xylenes (total)	ប	0.0150	mg/Kg wet							
Surrogate: 4-Bromofluorobenzene	0.0496		mg/Kg wet	0.050000		99	75-120			
Surrogate: 1,2-Dichlaroethane-d4	0.0449		mg/Kg wet	0.050000		90	75-119			
Surrogate: Toluene-d8	0.0499		mg/Kg wet	0.050000		100	78-114			
LCS (W001367-BS1)				Prepared &	Analyzed:	03/19/2013				
Венгене	0.0526	0.00500	mg/Kg wet	0.050000		105	80-130			
Ethylbenzene	0.0510	0.00500	mg/Kg wet	0.050000		102	77-132			
Methyl tert-butyl ether	0.101	0.00500	mg/Kg wet	0.10000		101	70-130			
Toluene	0.0527	0.00500	mg/Kg wet	0.050000		105	80-130			
Xylenes (total)	0.153	0.0150	mg/Kg wet	0.15000		102	80-130			
Surrogate: 4-Bromofluorobenzene	0.0495		mg/Kg wet	0.050000		99	75-120			
Surrogate: 1,2-Dichloroethane-d4	0.0438		mg/Kg wet	0.050000		88	75-119			
Surrogate: Toluene-d8	0.0497		mg/Kg wet	0.050000		99	78-114			
Matrix Spike (W001367-MS1)	Sou	rce: 13C0337	7-01	Prepared &	Analyzed:	03/19/2013	,			
Benzene	0.0561	0.00596	mg/Kg dry	0.059554	0.00440	87	50-140			
Ethylbeuzene	0.0858	0.00596	mg/Kg dry	0.059554	0.0103	127	50-140			
Methyl tert-butyl ether	0.0974	0.00596	mg/Kg dry	0.11911	ND	82	55-135			
Toluene	0.0515	0.00596	mg/Kg dry	0.059554	0.00570	77	55-135			
Xylenes (total)	0.173	0.0179	mg/Kg dry	0.17866	0.0127	90	60-130			
Surrogate: 4-Bromofluorobenzene	0,0657		mg/Kg dry	0.059554		110	75-120			
Surrogate: 1,2-Dichloroethane-d4	0.0608		mg/Kg dry	0.059554		102	75-119			
Surrogate: Toluene-d8	0.0624		mg/Kg dry`.	0.059554	•	105	78-114			

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Secure 13 C0337-01 Prepared & Analyzed: 63/19/2013 Secure 13 C0337-01 Prepared & Analyzed: 63/19/2013 Secure 10 C0534 0.06651 mg/kg dy 0.065130 0.01040 83 0.0140 4 20 20 R.	Analyte	Result	Reporting Limit	Units	Spik e Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sametine 0.0584 0.00651 mg/Kg dry 0.05130 0.00440 83 50-140 4 20 20 20 20 20 20 2	Batch W001367 - SW 5035A VOA										
28-july-bearane 0.108	Matrix Spike Dup (W001367-MSD1)	Sou	rce: 13C0337-	01	Prepared &	Analyzed:	03/19/201	3			
March Marc	Веплепе	0.0584	0.00651	mg/Kg dry	0.065130	0.00440	83	50-140	4	20	
Column	Ethylbenzene	0.108	0.00651	mg/Kg dry	0.065130	0.0103	150	50-140	23	20	R, S
Sylanes (uetal) 0.197 0.195 mig/Kg dry 0.19539 0.0127 94 60-130 13 20	Methyl tert-butyl ether	0.103	0.00651	mg/Kg dry	0.13026	ND	79	55-135	5	25	
### 10.0028 ###################################	Toluene	0.0524	0.00651	mg/Kg dry	0.065130	0.00570	72	55-135	2.	20	
Sarch No.0687 mg/Kg dry 0.065130 105 73-119	Xylenes (total)	0.197	0.0195	mg/Kg dry	0.19539	0.0127	94	60-130	13	20	
Sarch W001372 - SW 5035A VOA Sarch W001372 - SW 5035A VOA	Surrogate: 4-Bromofluorobenzene	0.0828		mg/Kg dry	0.065130		127	75-120			
Prepared & Analyzed: 03/19/2013	Surrogate: 1,2-Dichloroethane-d4	0.0687		mg/Kg dry	0.065130		105	75-119			
Prepared & Analyzed: 03/19/2013	Surrogate: Toluene-d8	0.0684		mg/Kg dry	0.065130		105	78-114			
Nectors	Batch W001372 - SW 5035A VOA							·····	,		
Service U 0.00500 mg/Kg wet	Blank (W001372-BLK1)				Prepared &	Analyzed:	03/19/2013	3			
Second dichlycomethane U 0.00500 mg/kg wet mg/kg wet mg/kg wet mg/kg wet	Àcetone	U	0.0500	mg/Kg wet					7		
### Second Commendations	Бепдере	ប	.0.00500	mg/Kg wet							
Description of the property	Bromodichloromethane	U								•	
Desiration Des	Bromoform	ប	0.00500	mg/Kg wet							
Carbon disulfide	Bromomethane	ប	0.0100	mg/Kg wet							
Description tetrachloride	2-Butanone	บ	0.0100	mg/Kg wet							
Description	Carbon disulfide	บั	0.0100	mg/Kg wet							
Description	Carbon tetrachloride	U	0.00500	mg/Kg wet							
Description	Chlorobenzene	U	0.00500	mg/Kg wet							
Diction Dict	Chloroethane	บ	0.0100	mg/Kg wet							
Dichloromethane	Chloroform	Ü	0.00500	mg/Kg wet							
Dichloroethane	Chloromethane	U	0.0100	mg/Kg wet							
2-Dichloroethene	Dibromochloromethane	ប	0.00500	mg/Kg wet							
1-Dichloroethene	1,1-Dichloroethane	υ	0.00500	mg/Kg wet							
1	1,2-Dichloroethane		0:00500	mg/K-g-wet-					·		
	1,1-Dichloroethene		0.00500	mg/Kg wet							
2-Dichloropropane U 0.00500 mg/Kg wet	ris-1,2-Dichloroethene		0.00500	mg/Kg wet							
1	rans-1,2-Dichloroethene	υ	0.00500	mg/Kg wet							
Description	1,2-Dichloropropane										
U 0.00500 mg/Kg wet -Hexanone	cis-1,3-Dichloropropene									•	
D	trans-1,3-Dichloropropene										
Methyl tert-butyl ether U 0.00500 mg/Kg wet -Methyl-2-pentanone U 0.00500 mg/Kg wet Methylene chloride U 0.00500 mg/Kg wet ktyrene U 0.00500 mg/Kg wet 1,2,2-Tetrachloroethane U 0.00200 mg/Kg wet Cetrachloroethene U 0.00500 mg/Kg wet Coluene U 0.00500 mg/Kg wet 1,1-Trichloroethane U 0.00500 mg/Kg wet 1,2-Trichloroethane U 0.00500 mg/Kg wet	Ethylbenzene										
-Methyl-2-pentanone U 0.00500 mg/Kg wet Methylene chloride U 0.00500 mg/Kg wet Styrene U 0.00500 mg/Kg wet 1,2,2-Tetrachloroethane U 0.00500 mg/Kg wet Cetrachloroethane U 0.00500 mg/Kg wet Coluene U 0.00500 mg/Kg wet 1,1,1-Trichloroethane U 0.00500 mg/Kg wet 1,1,2-Trichloroethane U 0.00500 mg/Kg wet 1,2,2-Trichloroethane U 0.00500 mg/Kg wet 1,2,2-Trichloroethane U 0.00500 mg/Kg wet	2-Hexanone										
Methylene chloride U 0.00500 mg/Kg wet detryrene U 0.00500 mg/Kg wet 1,2,2-Tetrachloroethane U 0.00200 mg/Kg wet Cetrachloroethene U 0.00500 mg/Kg wet Coluene U 0.00500 mg/Kg wet 1,1,1-Trichloroethane U 0.00500 mg/Kg wet 1,2-Trichloroethane U 0.00500 mg/Kg wet	Methyl tert-butyl ether										
Styrene U 0.00500 mg/Kg wet ,1,2,2-Tetrachloroethane U 0.00200 mg/Kg wet Cetrachloroethene U 0.00500 mg/Kg wet Coluene U 0.00500 mg/Kg wet ,1,1-Trichloroethane U 0.00500 mg/Kg wet ,1,2-Trichloroethane U 0.00500 mg/Kg wet	1-Methyl-2-pentanone										
1,2,2-Tetrachloroethane	Methylene chloride										
Vetrachloroethene U 0.00500 mg/Kg wet Coluene U 0.00500 mg/Kg wet ,1,1-Trichloroethane U 0.00500 mg/Kg wet ,1,2-Trichloroethane U 0.00500 mg/Kg wet	Styrene										
Coluene U 0.00500 mg/Kg wet ,1,1-Trichloroethane U 0.00500 mg/Kg wet ,1,2-Trichloroethane U 0.00500 mg/Kg wet											
1,1,1-Trichloroethane U 0.00500 mg/Kg wet ,1,2-Trichloroethane U 0.00500 mg/Kg wet	Tetrachloroethene										
,1,2-Trichloroethane U 0.00500 mg/Kg wet	Toluene										
• •	1,1,1-Trichloroethane										
Trichloroethme U 0.00500 mg/Kg wet	1,1,2-Trichloroethane										
	Trichloroethene	Ū	0.00500	mg/Kg wet							

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

	_	Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch W001372 - SW 5035A VOA				· ·						
Blank (W001372-BLK1)				Prepared &	Analyzed:	03/19/2013	3			
Vinyl chloride	υ	0.00500	mg/Kg wet							
Xylenes (total)	U	0.0150	mg/Kg wet							
Surrogate: 4-Bromofluorobenzene	0.0481		mg/Kg wet	0.050000		96	75-120			
Surrogate: 1,2-Dichloroethane-d4	0.0513		mg/Kg wet	0.050000		103	75-119			
Surrogate: Toluene-d8	0.0508		mg/Kg wet	0.050000		102	78-114			
LCS (W001372-BS1)	<u>.</u>			Prepared &	Analyzed:	03/19/2013	3			
Benzene	0.0439	0.00500	mg/Kg wet	0.050000		88	80-130			
Chlorobenzene	0.0513	0.00500	mg/Kg wet	0.050000		103	85-120			
1,1-Dichloroethene	0.0680	0.00500	mg/Kg wet	0.050000		136	70-130			
Ethylbenzene	0.0518	0.00500	mg/Kg wet	0.050000		104	77-132			
Foluenc .	0.0502	0.00500	mg/Kg wet	0.050000		100	80-130			
Trichloroethene	0.0456	0.00500	mg/Kg wet	0.050000		91	75-130	•		
Xylenes (total)	0.156	0.0150	mg/Kg wet	0.15000		104	80-130			
Surrogate: 4-Bromofluorobenzene	0.0494		mg/Kg wet	0.050000		99	75-120			
Surrogate: 1,2-Dichloroethane-d4	0.0419		mg/Kg wet	0.050000		84	75-119			
Surrogate: Toluene-d8	0.0500		mg/Kg wet	0.050000		100	78-114			
Batch W001407 - SW 5035A VOA										
Blank (W001407-BLK1)				Prepared: 03	3/20/2013 A	Analyzed: (3/21/2013			
3enzene ·	U	0.00500	mg/Kg wet		***				····	
Sthylbenzene	Ū	0.00500	mg/Kg wet							
Methyl tert-butyl ether	ប	0.00500	mg/Kg wet							
Coluene	U	0.00500	mg/Kg wet							
Kylenes (total)	U	0.0150	mg/Kg wet							
Surrogate: 4-Bromoflaorobenzene	0:0510		mg/Kg wet	0:050000		102	75 -12 0			
Surrogate: 1,2-Dichloroethane-d4	0.0442		mg/Kg wet	0.050000		88	75-119			
Surrogate: Toluene-d8	0.0518		mg/Kg wet	0.050000		104	78-114			

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch W001407 - SW 5035A VOA	· · · · · · · · · · · · · · · · · · ·	-								
LCS (W001407-BS1)				Prepared: 0	3/20/2013 .	Analyzed: (03/21/2013			
Велгере	0.0536	0.00500	mg/Kg wet	0.050000		107	80-130			
Ethylbenzene	0.0502	0.00500	mg/Kg wct	0.050000		100	77-132			
Methyl tert-butyl ether	0.108	0.00500	mg/Kg wet	0.10000		108	70-130			
Toluene	0.0532	0.00500	mg/Kg wet	0.050000		106	80-130			
Xylenes (total)	0.151	0.0150	mg/Kg wet	0.15000		101	80-130			
Surrogate: 4-Bromofluorobenzene	0.0524		mg/Kg wet	0.050000		105	75-120			
Surrogate: 1,2-Dichloroethane-44	0.0486		mg/Kg wet	0.050000		97	75-119			
Surrogate: Toluene-d8	0.0524		mg/Kg wet	0.050000		105	78-114			
Matrix Spike (W001407-MS1)	Sou	rce: 13C0341	-01RE1	Prepared: 0	3/20/2013 .	Analyzed: (03/21/2013			
Benzene	0.218	0.0219	mg/Kg wet	0.21930	ND	99	50-140			•
Sthylbenzene	0.189	0.0219	mg/Kg wet	0.21930	ND	86	50-140			
Methyl text-butyl ether	0.428	0.0219	mg/Kg wet	0.43860	ND	98	55-135			
Coluene	0.209	0.0219	mg/Kg wet	0.21930	ND	95	55-135		•	
Kylenes (total)	0.525	0.0658	mg/Kg wet	0.65789	· ND	80	60-130			
Surrogale: 4-Bromofluorobenzene	0.215		mg/Kg wet	0.21930		98	75-120			
Surrogate: 1,2-Dichloroethane-d4	0.204		mg/Kg wet	0.21930		93	75-119			
Surrogate: Toluene-d8	0.230		mg/Kg wet	0.21930		105	78-114			
Matrix Spike Dup (W001407-MSD1)	Sou	rce: 13C0341	-01RE1	Prepared: 0	3/20/2013	Analyzed: (03/21/2013			
Benzene	0.234	0.0227	mg/Kg wet	0.22727	ND	103	50-140	7	20	
Ethylbenzene	0.203	0.0227	mg/Kg wet	0.22727	ND	` 89	50-140	7	20	
Methyl tert-butyl ether	0.467	0.0227	mg/Kg wet	0.45455	ND	103	55-135	9	25	
ြပါမက	0.230	0.0227	mg/Kg wet	0.22727	ND	101	55-135	9	20	
Kylenes (total)	0.577	0,0682	mg/Kg wet	0.68182	ND	85	60-130	9	20	
Surrogate: 4-Bromofluorobenzene	0.219		mg/Kg wet	0.22727		96	75-120			
Surrogate: 1,2-Dichloroethane-d4	0.220		mg/Kg wet	0.22727	***************************************	97	75-119			
Surrogate: Toluene-d8	0.245	•	mg/Kg wet	0.22727		108	78-11 4			

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Anzlyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch W001374 - SW 3550B PNA										
Blank (W001374-BLK1)			······································	Prepared &	Analuzada	02/10/2013				
Acenaphthene	U	0.333	mg/Kg wet	i ichaica ic	Anayzou.	03/17/2012				
Acenaphthylene	U	0.333	mg/Kg wet							
Anthracene	บ	0,333	mg/Kg wet							
Benzo(a)anthracene	บ	0.333	mg/Kg wet							
Benzo(b)fluoranthene	Ŭ		mg/Kg wet							
Benzo(k)fiuoranthene	U	0.333	mg/Kg wet							
Benzo(g,h,i)perylene	U	0,333	mg/Kg wet							
Benzo(a)pyrene	υ	0.0600	mg/Kg wet							
Chrysene	υ	0.333	mg/Kg wet							
Dibenz(a,h)anthracene	U	0.0600	mg/Kg wet							
Fluorauthene	U	0.333	mg/Kg wet							
Fluorene	ũ	0.333	mg/Kg wet						-	
Іпаепо(1,2,3-са)ругеле	Ŭ	0.333	mg/Kg wet							
Naphthalene	U	0,333	mg/Kg wet							
Phenanthrene	U	0.333	mg/Kg wet							
Ругеве	υ	0.333	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	0.587		mg/Kg wet	0.66667		88	38-122			
Surrogate: Nitrobenzene-d5	0.590		mg/Kg wet	0.66667		89	45-136			
Surrogate: 4-Terphenyl-d14	0.687		mg/Kg wet	0.66667		103	64-131			
LCS (W001374-BS1)				Prepared &	Analyzed:	03/19/2013				
Acenaphthene	0.546	0.333	mg/Kg wet	0.66667		82	50-135			
Acenaphthylene	0.626	0.333	mg/Kg wet	0.66667		94	51-134			
Anthracene	0.565	0.333	mg/Kg wet	0.66667		85	56-131			
Benzo(a)anthracene	0.559	0.333	mg/Kg wet	0.66667		84	61-144			
Benzo(b)fluoranthene	0.779	0.333	mg/Kg wet	0.66667		117	57-134			
Benzo(k)fluoranthene	0.703	0.333	mg/Kg wet	0.66667		105	59-168			
Benzo(g,h,i)perylene	0.735	0.333	mg/Kg wet	0.66667		110	56-147			
Зепло(а)ругене	0.646		mg/Kg wet	0.66667		97	41-133			
Chrysene	0.663		mg/Kg wet	0.66667		99	63-150			
Dibenz(a,h)anthracene	0.673	0.0600	mg/Kg wet	0.66667		101	60-170			
Fluoranthene	0.637	0.333	mg/Kg wet	0.66667		96	65-147			
Tuorene	0.578		mg/Kg wet	0.66667		87	47-154			
ndeno(1,2,3-cd)pyrene	0.693	0.333	mg/Kg wet	0.66667		104	59-132			
Naphthalene	0.602		mg/Kg wet	0.66667		90	40-135			
Phenanthrene	0.623		mg/Kg wet	0.66667		93	62-134			
утепе	0.641	0.333	mg/Kg wet	0.66667		96	64-147		Wandards .	
Surrogate: 2-Fluorobiphenyl	0.627		mg/Kg wet	0.66667		94	38-122			
Surrogate: Nitrobenzene-d5	0.663		mg/Kg wet	0.66667		99	45-136			
Surrogate: 4-Terphenyl-d14	0.688		mg/Kg wet	0.66667		103	64-131			

%REC

RPD

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Semi-Volatile Organic Compounds by GC-MS - Quality Control

Reporting

Spike

Source

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch W001374 - SW 3550B PNA										
Matrix Spike (W001374-MS1)	Sour	ce: 13C0344	I-07	Prepared: 0	3/19/2013	Analyzed: (03/20/2013			
Acenaphthene	0.633	0.409	mg/Kg dry	0.81843	ND	77	50-135			
Acenaphthylene	0.705	0.409	mg/Kg dry	0.81843	ND	86	51-134			
Anthracene	0.708	0.409	mg/Kg dry	0.81843	ND	87.	56-131			
Benzo(a)anthracene	0.622	0,409	mg/Kg dry	0.81843	ND	76	61-144			
Benzo(b)fluoranthene	0.717	0.409	mg/Kg dry	0.81843	ND	88	57-134			
Benzo(k)fluoranthene	0.765	0.409	mg/Kg dry	0.81843	ND '	94	59-168			
Benzo(g,h,i)perylene	0.685	0.409	mg/Kg dry	0.81843	ND	84	56-147			
Benzo(a)pyrene	0.719	0.0737	mg/Kg dry	0.81843	ND	88	41-133			
Chrysene	0.796	0.409	mg/Kg dry	0.81843	ND	97	63-150			
Dibenz(a,h)anthracene	0.611	0.0737	mg/Kg dry	0.81843	ND	75	60-170			
Fluoranthene	0.716	0.409	mg/Kg dry	0.81843	ND	88	65-147			
Fluorene	0.664	0.409	mg/Kg dry	0.81843.	ND	81	47-154			
Indeno(1,2,3-cd)pyrene	0.648	0.409	mg/Kg dry	0.81843	ND	79	59-132			
Naphthalene	0.643	0.409	mg/Kg dry	0.81843	ND	79	40-135			
Phenauthrene	0.724	0.409	mg/Kg dry	0.81843	ND	88	62-134			
Рутепе	0.721	0.409	mg/Kg dry	0.81843	ND	88	64-147			
Surrogate: 2-Fluorobiphenyl	0.699		mg/Kg dry	0.81843		85	38-122			
Surrogate: Nitrobenzene-d5	0.723		mg/Kg dry	0.81843		88	45-136			
Surrogate: 4-Terphenyl-d14	0.794		mg/Kg dry	0.81843		97	64-131			
Matrix Spike Dup (W001374-MSD1)	Sour	ce: 13C0344	-07	Prepared: 0	3/19/2013 .	Analyzed: (3/20/2013			
Acenaphthene	0.613	0.393	mg/Kg dry	0.78653	ND	78	50-13 <i>5</i>	3	20	
Acenaphthylene	0.688	0.393	mg/Kg dry	0.78653	ND	87	51-134	2	20	
Anthracene	0.698	0.393	mg/Kg dry	0.78653	ND	89	56-131	1	20	
Benzo(a)anthracene	0.575	0.393	mg/Kg dry	0.78653	ND	73	61-144	8	20	
Benzo(b)fluoranthene	0.676	0.393	mg/Kg dry	0.78653	ND	86	57-134	6	20	
Benzo(k)fluoranthene	0.705	0.393	mg/Kg dry	0.78653	ND	90	59-168	8	20	
Benzo(g,h,i)perylene	0.615	0.393	mg/Kg dry	0.78653	ND	78	56-147	11	20	
Вепго(а)ругене	0.687	0.0708	mg/Kg dry	0.78653	ND	87	41-133	5	20	
Chrysene	0.733	0.393	mg/Kg dry	0.78653	ND	93	63-150	8	20	
Dibenz(a,h)authracene	0.548	0.0708	mg/Kg dry	0.78653	ND	70	60-170	11	20	
Fluoranthene	0.697	0.393	mg/Kg dry	0.78653	ND	89	65-147	3	20	
Fluorene	0.65 6	0.393	mg/Kg dry	0.78653	ND	83	47-154	1	20	
indeno(1,2,3-cd)pyrene	0.612	0.393	mg/Kg dry	0.78653	ND	78	59-132	6	20	
Naphthalene	0.617	0.393	mg/Kg dry	0.78653	ND	78	40-135	4	20	
Phenanthrene	0.698	0.393	mg/Kg dry	0.78653	ND	89	62-134	4	20	
Ругсае	0.689	0.393	mg/Kg đry	0.78653	ND	88	64-147	4	20	
Surrogate: 2-Fluorobiphenyl	0.671		mg/Kg đry	0.78653		85	38-122			
Surrogate: Nitrobenzene-d5	0.717		mg/Kg dry	0.78653		91	45-136			
Surrogate: 4-Terphenyl-d14	0.742		mg/Kg dry	0.78653		94	64-131			

LABORATORY RESULTS

Client:

`True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Metals by ICP-MS - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch W001371 - SW 3050B Metals										
Blank (W001371-BLK1)				Prepared &	: Analyzed:	03/19/2013	3			
Mercury	n	0.0800	mg/Kg wet							
Selenium	U	0.500	mg/Kg wet							
Silver	U ·	0.500	mg/Kg wet							
LCS (W001371-BS1)				Prepared &	: Analyzed:	03/19/2013	3			
Mercury	0.977	0.0800	mg/Kg wet	1.0000		98	80-120			
Selenium	24.7	0.500	mg/Kg wet	25.000		99	80-120			
Silver	2.41	0.500	mg/Kg wet	2.5000		96	80-120			
Matrix Spike (W001371-MS1)	Sou	rce: 13C0324	I-01	Prepared: 0	3/19/2013 .	Analyzed: (3/20/2013			
Mercury	1.11	0,0947	mg/Kg dry	1.1837	ND	94	75-125			
Selezium	30.8	0.592	mg/Kg dry	29.591	0.374	103	75-125			
Silver	2.62	0.592	mg/Kg dry	2.9591	ND	89	75-125			
Matrix Spike Dup (W001371-MSD1)	Son	rce: 13C0324	I-01	Prepared: 0	3/19/2013 .	Analyzed: (3/20/2013			
Метсшу	1.09	0.0950	mg/Kg dry	1.1872	MD	92	75-125	2	20	
Selenium	30.4	0.594	mg/Kg dry	29.680	0.374	101	75-125	1	20-	
Silver	2.75	0.594	mg/Kg dry	2.9680	ND	93	75-125	5	20	

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0344

Metals by ICP - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch W001370 - SW 3050B Metals										
Blank (W001370-BLK1)				Prepared &	. Analyzed:	03/19/201:	3			
Axsenic	Ü	0.500	mg/Kg wet							*****
Barium	U	0.250	mg/Kg wet							
Cadmium	ប	0.250	mg/Kg wet							
Chromium	U	0.250	mg/Kg wet							
Lead	υ	0.250	mg/Kg wet							
LCS (W001370-BS1)				Prepared &	: Analyzed:	03/19/2013	3			
Arsenic	26.3	0.500	mg/Kg wet	25.000		105	85-115			
Barium	26.5	0.250	mg/Kg wet	25,000		106	85-115			
Cadmium	25.8	0.250	mg/Kg wet	25.000		103	85-115			
Chromium	25.7	0.250	mg/Kg wet	25.000		103	85-115			
Lead	25.9	0.250	mg/Kg wet	25.000		104	85-115			
Matrix Spike (W001370-MS1)	Sour	ce: 13C0324	-01	Prepared &	Analyzed:	03/19/2013	3			
Arsenic	35.5	0.592	mg/Kg dry	29.591	6.05	99	75-125			
Barium	73.0	0.296	mg/Kg dry	29.591	38.9	115	75-125			
Cadraium	27.6	0,296	mg/Kg dry	29.591	0.747	91	75-125			
Chromium	45.8	0.296	mg/Kg dry	29.591	14,0	107	75-125			
Lead	85.6	0.296	mg/Kg dry	29,591	71.9	46	75-125			E,
Matrix Spike Dup (W001370-MSD1)	Sour	ce: 13C0324	-01	Prepared &	Analyzed:	03/19/2013	3			
Arsenic	32.9	0.594	mg/Kg dry	29.680	6.05	91	75-125	7	20	
Barium	54.0	0,297	mg/Kg dry	29.680	38.9	51	75-125	30	20	R,
Cadmium	25.4	0.297	mg/Kg dry	29.680	0.747	83	75-125	8	20	•
Chromium	36.9	0.297	mg/Kg dry	29.680	14.0	77	75-125	21	20	
Lead	66.5	0.297	mg/Kg dry	29,680	71.9	NR.	75-125	25	20	E, R,

LABORATORY RESULTS

Client:

True North Consultants

Project:

Comell Ave: Armitage-North Ave.

Lab Order: 13C0344

Conventional Chemistry Parameters - Quality Control

l .										
		Reporting	4	Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch W001357 - ASTM D2216 Moisture										
Blank (W001357-BLK1)				Prepared: (3/18/2013	Analyzed:	03/19/2013			
Percent Solids	υ	0.100	%							**
Duplicate (W001357-DUP1)	Sou	rce: 13C0344-	06	Prepared: (3/18/2013	Analyzed: (03/19/2013			
Percent Solids	82.3	0.100	%		81.0		J=1	2	20	******
Batch W001382 - ASTM D2216 Moisture							****			
Blank (W001382-BLK1)				Ртерагеd: (3/19/2013	Analyzed: (03/20/2013			
Percent Solids	U	0.100	%							
Duplicate (W001382-DUP1)	Sou	rce: 13C0355-	14	Prepared: (3/19/2013	Analyzed: (03/20/2013			•
Percent Solids	79.6	0.100	%		79.1			0.5	20	·····

	LABORATORY	Z RESULTS				
Client: Project:	True North Consultants Cornell Ave: Armitage-North Ave.	L2b Order: 13C0344				
	Notes and Defin	tions				
S2	Surrogate recovery exceeds the acceptance criteria due to matrix intassociated analyte(s).	erference, but there is no observable concentration in				
S	Spike recovery outside acceptance limits.					
R	RPD outside acceptance limits.					
M	Reporting limit set between LOQ and MDL.					
ı	Matrix interference.					
Е	Result above quantitation range.					
C1	Analyte result confirmed by second analysis.					
*	NELAC certified compound.					
บ	Analyte not detected (i.e. less than RL or MDL).					



www.prairieanalylical.com

Central It. - 1210 Capital Alrport Drive - Springfield, It. 52707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152
Chicago It. Olfice - 9114 Virginia Rd., Ste 112 - Lake in the Hills, It. 60/56 - Phone (847) 531-2604 - Facsimile (847) 458-9680
Central/Southern It. Office - Phone (217) 414-7752 - Facsimile (217) 223-7922

Chain of Custody Record

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	Client	True North Consultants	ultants							Analy	sis and/or N	Analysis and/or Method Requested	equestod			- Allacado
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Tuesday, March 19, 2013

Marjory McMahon

True North Consultants

1240 Iroquois Avenue, Suite 210

Naperville, IL 60563

TEL: (630) 717-2880 FAX: (630) 689-5881

RE: Cornell Ave: Armitage-North Ave.

PAS WO:

13C0345

Prairie Analytical Systems, Inc. received 1 sample(s) on 3/13/2013 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

This report shall not be reproduced, except in full, without the prior written consent of Prairie Analytical Systems, Inc.

If you have any questions, please feel free to contact me at (217) 753-1148.

Respectfully submitted,

Kristen A. Potter

Project Manager

Certifications:

NELAP/NELAC - IL #100323

1210 Capital Airport Drive 9114 Virginia Road Suite #112 Springfield, IL 62707

1.217.753.1148

1.217.753.1152 Fax

Lake in the Hills, IL 60156

1.847.651.2604

1.847.458.0538 Fax

Prairie Analytical Systems, Inc.

Date: 3/19/2013

LABORATORY RESULTS

Client:

True North Consultants

Project:

Comell Ave: Armitage-North Ave.

Lab Order: 13C0345

Client Sample ID: Collection Date: SB 5

Lab ID: 13C0345-01

3/13/13 14:15

Matrix: Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Conventional Chemistry Parameters								· · · ·	
*pH	8.04	0.0100		pH Units	1	3/19/13 11:55	3/19/13 13:13	SW 9045C	CCD

Prairie Analytical Systems, Inc.

Date: 3/19/2013

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0345

Conventional Chemistry Parameters - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch W001386 - SW 9045C pH

Duplicate (W001386-DUP1)		13C0325	-03	Prepared & Analyzed: 03/19/2013			
pH	8.37	0.0100	pH Units	8.34	0.3	5	

Date: 3/19/2013

LABORATORY RESULTS

Client:

True North Consultants

Project:

Cornell Ave: Armitage-North Ave.

Lab Order: 13C0345

Notes and Definitions

NELAC certified compound.

U Analyte not detected (i.e. less than RL or MDL).

Fried Wardell Systems, modernesses

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Chain of Custody Record

Central IL - 1210 Capual Airport Divve - Springfield, IL 62707-8480 - Phone (217) 753-1143 - Facsunite (217) 753-1152
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Centrali Southern IL Office - Phone (217) 414-7762 - Facsimite (217) 223-7022

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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

- 5011	. Doub			
Village of Melrose	e Park			
		 , ,		
		 		

The entities listed above and their officers, employees, and agents shall be indemnified and

held harmless in accordance with Article 107.26.

ABOVE GRADE INLET PROTECTION (BDE)

Effective: July 1, 2009 Revised: January 1, 2012

Add the following to Article 280.02 of the Standard Specifications:

Add the following paragraph after the second paragraph of Article 280.04(c) of the Standard Specifications:

"When above grade inlet filters are specified, they shall be of sufficient size to completely span and enclose the inlet structure. Prior to ordering materials, the Contractor shall determine the size of the various drainage structures being protected."

Add the following paragraph after the second paragraph of Article 280.08(d) of the Standard Specifications:

"Protection of drainage structures with rigid inlet protection assemblies will be paid for at the contract unit price per each for ABOVE GRADE INLET FILTERS."

Add the following to Article 1081.15 of the Standard Specifications:

- "(j) Above Grade Inlet Filters. Above grade inlet filters shall consist of a rigid polyethylene frame covered with a fitted geotextile filter. A clean, used fitted filter and a used rigid polyethylene frame in good condition meeting the approval of the Engineer may be substituted for new materials. Materials for the above grade inlet filter assembly shall be according to the following.
 - (1) Frame Construction. Frame shall be constructed of a high density polyethylene copolymer. The design of the frame shall allow the structure to fit completely over the sewer inlet. The frame shall be a minimum of 26 in. (650 mm) tall and the top of the frame shall be designed with an opening to allow large volumes of water to pass through under high flow events. The frame shall conform to the following requirements:

	Frame	
Material Property	Test Method	Value
Tensile Yield Strength	ASTM D 638	3600 psi (24.82 MPa)
Elongation at Break	ASTM D 638	>600%
Tensile-Impact Strength	ASTM D 1822	170 ft lb/sq in (230 J)
Brittleness Temperature	ASTM D 746	<-105°F (-76.11°C)
Environmental Stress Cracking	ASTM D 1693	>800 hours
Durometer Hardness,	ASTM D 2240	68

Shore A		
Vicat Softening Temperature	ASTM D 1525	254°F (123.33°C)
Deflection Temperature	ASTM D 648	157°F (69.44°C)
Coefficient of Linear Thermal Expansion	ASTM D 696	7x10 ⁻⁵ in/in/°F (12.6x10 ⁻⁵ m/m/°C)
Bulk Density	ASTM D 1895	37 lbs/cu ft (592.7 kg/cu m)

(2) Fitted Geotextile Filter. The sides of the fitted geotextile filter shall be constructed of 100 percent continuous polyester needle-punched fabric. The filter shall be fabricated to provide a direct fit to the frame. The top of the filter shall integrate a coarse screening to allow large volumes of water to pass through in the event of heavy flows. This screening shall have a minimum apparent opening of 1/2 in. (13 mm). The filter shall have integrated anti-buoyancy pockets capable of holding no less than 3.0 cu ft (0.08 cu m) of stabilization material. Each filter shall have a label with the following information sewn to or otherwise permanently adhered to the outside: manufacturer's name, product name, and lot, model or serial number. The fitted geotextile filter shall conform to the following requirements:

F	tted Geotextile Filte	er
Material Property	Test Method	Minimum Avg. Roll Value
Weight	ASTM D 3776	3.0 oz/sq yd +/- 10% (71.1 grams/sq m)
Grab Tensile Strength	ASTM D 4632	80 lb min. (36.29 kg)
Grab Tensile Elongation	ASTM D 4632	50%
Bursting Strength	ASTM D 3786	150 psi min. (1.03 MPa)
Puncture Resistance	ASTM D 4833	50 lb min. (22.68 kg)
Trapezoid Tearing Strength	ASTM D 4533	30 lb min. (13.61 kg)
Apparent Opening Size	ASTM D 4751	Sieve No. 70 (0.212 mm)
Permittivity	ASTM D 4491	2.0/sec
Water Permeability	ASTM D 4491	102 gal/min/sq ft (4150 liter/min/sq m)
UV Resistance	ASTM D 4355	70% at 500 hours

(3) Certification. The manufacturer shall furnish a certificate with each shipment of above grade inlet filter assemblies, stating the amount of product furnished and that the material complies with these requirements."

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
1 2010 1/		2000
June 1, 2010 ^{1/}	600-749	2002
	750 and up	2006
June 1, 2011 ^{2/}	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 2/	50-99	2004
	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.

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* (http://www.epa.gov/cleandiesel/verification/verif-list.htm), or verified by the California Air Resources Board (CARB) (http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm); 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

^{2/} Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

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

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

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

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

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

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

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

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

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

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

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

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

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

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

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

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is

based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 25.00% 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.

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

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

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
 - 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 owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217)785-4611. Telefax number (217)785-1524.
- (b) <u>TERMINATION OR REPLACEMENT</u>. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in the Special Provision.
- (c) <u>CHANGES TO WORK</u>. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

- (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
- (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
- (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

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

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;

- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.
 - When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal.
- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the BDE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative

- reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

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"

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.

Quality Control/Quality Assurance (QC/QA). 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 one-minute 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,	Ndesign < 90	92.5 – 97.4%	90.0%
IL-12.5	ŭ		
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

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

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

Note 1. The fine aggregate shall be moist.

Note 2. The coarse aggregate shall be wet."

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

"Class	Materials
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 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 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
D	Corrugated Polypropylene (CPP) Pipe with Smooth Interior 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 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 Aluminized Steel Type 2 Corrugated Pipe Arch Precoated Galvanized Corrugated Steel Pipe Precoated Galvanized Corrugated Steel Pipe Corrugated Aluminum Alloy Pipe Corrugated Aluminum Alloy Pipe Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior Corrugated Polyethylene (PE) Pipe with a Smooth Interior Polyethylene (PE) Pipe with a Smooth Interior

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 7	Fill Height:	Greater than 30'	not exceeding 35'	Λ	>	^	^	>	>	٨	>	^	۸	>	^	^	2730	2740	2750	2750	2760	2770
э Ріре	Type 6	Fill Height:	Greater than 25'	not exceeding 30'	^	>	^	>	>	>	۸	>	^	^	>	۸	۸	2370	2380	2390	2400	2410	2410
"Table IA; Classes of Reinforced Concrete Pipe for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe	Type 5	Fill Height:	Greater than 20	not exceeding 25'	2	2	2	2	2	2	ΛI	≥	Ν	ΛΙ	≥	۸۱	۸	2020	2020	2030	2040	2050	2060
"Table IA: Classes of Reinforced Concrete Pipe ive Diameters of Pipe and Fill Heights over the	Type 4	Fill Height:	Greater than 15'	not exceeding 20'	^	2	N	<u> </u>	≥	2	۸۱	≥	IV	<u> </u>	2	IV	٨	2	IV	1680	1690	1700	1710
"Table IA: Classe ective Diameters of	Type 3	Fill Height:	Greater than 10'	not exceeding 15'	=	=	=	=	=	=	=	=		=	=		=	=		=	=	2	1360
for the Resp	Type 2	Fill Height:	Greater than 3'	not exceeding 10'						=			_	=	=	=	=	=	_	=	=	=	=
	Type 1	Fill Height:	3' and less	1' min cover	2	2	≥	=	=	2		=	=		=	=		_	=	_	=	=	_
		Nominal	Diameter	<u> </u>	12	5	18	21	24	30	36	42	48	54	09	99	72	78	84	06	96	102	108

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

TO DESCRIPTION OF THE PROPERTY		for the R	Table IA: Classe espective Diameters of	Table IA: Classes of Reinforced Concrete Pipe for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe (Metric)	e Pipe er the Top of the Pipe		
	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7
Nominal Diameter	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:
E	1 m and less 0.3 m min cover	Greater than 1 m not exceeding 3 m	Greater than 3 m not exceeding 4.5 m	Greater than 4.5 m not exceeding 6 m		Greater than 6 m not Greater than 7.5 m not exceeding 7.5 m exceeding 10.5 m	Greater than 9 m not exceeding 10.5 m
300	2	=	≡	>	N.	^	>
375	2	=	=	2	2	>	>
450	N	=	=	1/	ľV	۸	>
525	III	11	=	ΛI	ΛΙ	۸	>
009		=	=	2	Δ	>	>
750	١٧	-	===	1/	ΙV	^	^
006	=			2	ΛΙ	۸	Λ
1050	=	=	=	2	2	>	>
1200	=	=	=	λ1	IV	Λ	>
1350	=	=	=	>	≥	>	^
1500		=	=	>	≥	>	>
1650	==	_	=	>	١٨	^	^
1800	=	=	=	2	>	>	>
1950	=	=	=	2	100	110	130
2100	=	=	=	N	100	110	130
2250	=	٥	=	80	100	110	130
2400	=	=	=	80	100	110	130
2550	=	=	≥	80	100	120	130
2700	=		70	80	100	120	130
Motor							

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

		FOR T	TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2", 3"x1" AND 5"x1" CORRUGATIONS	PECTIVE	DIAMET	ER OF F	TAE	SLE IB: '	TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR (SS OF C	ORRUG	ATED ST OF THE F	EEL PIP	'E ? 2 2/3"x	1/2", 3"x	1" AND 5	"x1" COF	RUGAT	SNOL		
		Type 1			Type 2			Type 3			Type 4			Type 5			Type 6			Type 7	
Nominal		Fill Height:	Ĭ.		Fill Height:	ī		Fill Height:	t;	Ш	Fill Height:		正	Fill Height:		ίĒ	Fill Height:		-	Fill Height:	
Diameter in.	, , , , , , , , , , , , , , , , , , , 	3' and less 1' min, cover	şs ver	not e	Greater than 3' not exceeding 10'	n 3' g 10'	Gre not (Greater than 10' not exceeding 15'	າ 10' g 15'	Gree not e	Greater than 15' not exceeding 20'	15. 20.	Gree not ex	Greater than 20' not exceeding 25'	20'	Gree not ex	Greater than 25' not exceeding 30'	30,	Gre	Greater than 30' not exceeding 35'	30,
	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"×1"	2 2/3" x 1/2"	3"×1"	5"x1"	2 2/3" × 1/2"	3"×1"	5"x1"
12*	0.109			0.079			0.079			0.079			0.079			0.079			0.079		
15	0.109			0.079			0.079			0.079			0.079			0.109			0.109		
18	0.109			0.079			0.079			0.079			0.109			0.109			0.109		
21	0.109			0.079			0.079			0.079			0.109			0.109			0.109		
24	0.109			0.079			0.079			0.109			0.109			0.109			0.109		
30	0.109			0.079			0.109			0.109			0.109			0.109			0.109		
36	0.109≝			0.079			0.109			0.109			0.109			0.109			0.138E		
42	0.109	0.109	0.109	0.079	0.079	0.079	0.109	0.079	0.109	0.109	0.079	0.109	0.109	0.109	0.109	0.109E	0.109	0.109	0.138E	0.109	0.109
48	0.109	0.109	0.109	0.109	0.079	0.079	0.109	0.079	0.109	0.109	0.109	0.109	0.109	0.109	0.109	0.138E	0.109	0.109	0.138臣	0.109	0.109
54	0.109	0.109	0.109	0.109	0.079	0.109	0.109	0.079	0.109	0.109	0.109	0.109	0.109	0.109	0.109	0.138E	0.109	0.109	0.168E	0.138	0.138
90	0.109	0.109	0.109	0.109	0.079	0.109	0.109	0.079	0.109	0.109	0.109	0.109	0.138	0.109	0.109	0.138E	0.109	0.138	0.168E 0.138E	0.138E	0.138E
99	0.138	0.109	0.109	0.138	0.079	0.109	0.138	0.109	0.109	0.138	0.109	0.109	0.138	0.109	0.109	0.138E	0.138	0.138	0.168E 0.138E	0.138E	0.168E
72	0.138	0.109	0.109	0.138	0.079	0.109	0.138	0.109	0.109	0.138	0.109	0.109	0.138	0.109	0.138	0.168E 0.138E 0.138E 0.168E 0.138E	0.138E	J.138E	0.168E	0.138E	0.168E
78	0.168	0,109	0.109	0.168	0.079	0.109	0.168		0.109	0.168	0.109			0.138		0.168E 0.138E 0.138E 0.168E 0.168E	0.138E	J.138E	0.168E	0.168E	0.168E
84	0.168	0.109	0.138	0.168	0.079	0.109	0.168	0.109	0.109	0.168	0.109	0.109	0.168	0.138	0.138	0.168E 0.138E 0.168E	0.138E		0.168E	0.168层	0.168E
06		0.138	0.138		0.079	0.109		0.109	0.109		0.109	0.138		0.138	0.138		0.168E 0.168E	J.168E		0,168日	0.168E
96		0.138	0.138		0.109	0.109		0.109	0.109		0.138	0.138		0.138	0.168	-	0.168E (0.168E		0.168E	0.168E
102		0.138Z	0.138Z		0.109	0.109		0.109	0.109		0.138	0.138			0.168		0.168E 0.168E).168E			
108		0.138Z	0.168Z		0.109	0.109		0.109	0.109		0.138	0.138		0.168	0.168	-	0.168E	0.168臣			
114		0.138Z			0.109	0.109		0.109	0.109		0.138	0.168		0.168	0.168	<u> </u>	0.168E 0.168E).168E			
120		0.138Z	0.168Z		0.109	0.109		0.109	0.138	****	0.138	0.168		0.168	0.168						
126		0.168Z	0.168Z		0.138	0.138		0.138	0.138		0.138	0.168		0.168	0.168		\dagger				
132		0.168Z			0.138	0.138		0.138	0.138			0.168		0.168	0.168						
138		0.168Z			0.138	0.138		0.138	0.138			0.168		0.168	0.168						
144 Notes		0.168Z	0.168Z		0.168	0.168		0.168	0.168		0.168	0.168	1								

Notes:

1/1/2" x 1/4" corrugations shall be use for 6", 8", and 10" diameters.

1/1/2" x 1/4" corrugations shall be use for 6", 8", and 10" diameters.

1/2" x 1/4" corrugation staticle 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 1'.6"

2 1'-6" Minimum fill

Longitudinal seams assumed.

FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm, 75 mm x 25 mm CORRUGATIONS (Metric)																					
	Ţ	Type 1	П		Type 2			Type 3			Type 4			Type 5			Type 6			Type 7	
		Fill Height:		т (Heigh	ا ند	<u>;</u>	Fill Height:		_ (Fill Height	ا با - نت	- (Fill Height:	ا ن		Fill Height:	t +- •	ц. (Fill Height:	
- 1	1 m and tess 0.3 m min. cover	1 m and tess 3 m min. cov	, Ger	note	oreater than 1 m not exceeding 3 m	13 m	not es	orealer (nan 3 m not exceeding 4.5 m	3 m 4.5 m	not e	oreater (nan 4.5 m not exceeding 6 m	#.5.m 1,6.m	not ex	Greater tran 6 m not exceeding 7.5 m	7.5 m	uses not e	Greater than 7.5 m not exceeding 9 m	m c.7	Grea not exc	Greater than 9 m not exceeding 10.5 m	7 Ⅲ 3.5 Ⅲ
∞ ⊑	3 x 13 75 mm	5 x 25 12 mm	25 x 25 (mm	68 x 13	75 x 25 mm	68 x 13 75 x 25 125 x 25 68 x 13 75 x 25 125 x 25 mm mm mm mm	68 x 13 mm	75 x 25 mm	68 x 13 75 x 25 125 x 25 mm mm	68 x 13	75 x 25 mm	75 x 25 125 x 25 mm mm	68 x 13 mm	75 x 25 mm	68 x 13 75 x 25 125 x 25	68 x 13 mm	75 x 25 mm	75 x 25 125 x 25 mm	68 x 13 mm	68 x 13 75 x 25 125 x 25 mm mm	25 x 2
2	2.77			2.01			2.01			2.01			2.01			2.01	<u> </u>		2.01		
2	2.77			2.01			2.01	•		2.01			2.01			2.77			2.77		
ان<	2.77			2.01			2.01			2.01			2.77			2.77			2.77		
2	2.77			2.01			2.01			2.01			2.77			2.77			2.77		
ς,	2.77			2.01			2.01			2.77			2.77			2.77			2.77		
2.	2.77			2.01			2.77			2.77			2.77			2.77			2.77		
2	2.77E			2.01			2.77			2.77			2.77			2.77			3.51⊑		
2	2.77 2.	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.	2.77	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
2	2.77 2.	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
٥i	2.77 2.	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	3.51€
ω,	3.51 2.	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	2.77	3.51臣	3.51	3.51	4.27E	3.51€	4.27E
က			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	4.27E	3.51E	3.51E	4.27E	3.51E	4.27E
4			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	4.27E	3.51⊑	3.51E	4.27E	4.27E	4.27E
4.	4.27 2.	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	4.27E	3.51E	4.27E	4.27E	4.27E	4.27E
	ന്		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
	<u>က်</u>		3.51		2.77	2.77		2.77	2.77		3.51	3.51		3.51	4.27		4.27E	4.27E		4.27E	4.27E
	<u>.</u>	3.51Z 3	3.51Z		2.77	2.77		2.77	2.77		3.51	3.51		3.51	4.27		4.27E	4.27E			
	3,1	3.51Z 4	4.27Z		2.77	2.77		2.77	2.77		3.51	3.51		4.27	4.27		4.27E	4.27E			
	3,5	3.51Z 4	4.27Z		2.77	2.77		2.77	2.77		3.51	4.27		4.27	4.27		4.27E	4.27E			
	3,	3.512 4	4.27Z		2.77	2.77		2.77	3.51		3.51	4.27		4.27	4.27						
	4.	4.27Z 4	4.27Z		3.51	3.51		3.51	3.51		3.51	4.27		4.27	4.27						
		4.27Z 4	4.27Z		3.51	3.51		3.51	3.51		4.27	4.27		4.27	4.27						
		4.27Z 4	4.27Z		3.51	3.51		3.51	3.51		4.27	4.27		4.27	4.27						
	4.,	4.272 4	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.

E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 450 mm Lagorithm on Minimum Fill Longitudinal seams assumed.

Type 6 Type 7	Fill Height: Fill Height:	Greater than 25' Greater than 30' inot exceeding 30' not exceeding 35'	1" 2 2/3"x1/2" 3"x1" 2 2/3"x1/2" 3"x1"	90.0	90.0	0.06 0.075	0.075 0.075E	0.075 0.075E	0.105E 0.105E	0.105E 0.105E		05 0.105E 0.105E 0.135E 0.135E	05 0.105E 0.135E 0.135E 0.135E	05 0.135E 0.135E 0.164E 0.135E	35 0.164E 0.135E 0.135E	35 0.135E 0.164E	35 0.135E 0.164E	35 0.164E 0.164E	35 0.164E 0.164E		34 0.164E	54	34	54
Type 5	Fill Height:	Greater than 20' not exceeding 25'	2 2/3"x1/2" 3"x1"	90'0	90'0	90.0	90.0	90.0	0.075	0.105	0.105 0.06	0.105 0.105	0.105 0.105	0.135 0.105	0.164 0.135	0.164 0.135	0.135	0.135	0.135	0.164	0.164	0.164	0.164	0.164
Type 4	Fill Height:	Greater than 15' not exceeding 20'	2 2/3"x1/2" 3"x1"	90.0	90:0	90:0	90.0	90.0	0.075	0.075	0.105 0.06	0.105 0.06	0.105 0.105	0.135 0.105	0.164 0.105	0.164 0.105	0.135	0.135	0.135	0.135	0.135	0.135	0.164	0.164
Type 3	Fill Height:	Greater than 10' not exceeding 15'	2 2/3"x1/2" 3"x1"	90'0	90'0	90.0	0.06	90.0	0.075	0.075	0.105 0.06	0.105 0.06	0.105 0.06	0.135 0.06	0.164 0.06	0.164 0.105	0.102	0.105	0.105	0.105	0.135	0.135	0.164	0.164
Type 2	Fill Height:	Greater than 3' not exceeding 10'	2 2/3"x1/2" 3"x1"	90.0	90.0	90.0	90.0	90.0	0.075	0.075	0.105 0.06	0.105 0.06	0.105 0.06	0.135 0.06	0.164 0.06	0.164 0.06	0.075	0.105	0.102	0.105	0.135	0.135	0.164	0.164
Type 1	Fill Height:	3' and less 1' min. cover	2 2/3"x1/2" 3"x1"	90.0	90.0	90.0	0.075E	0.075E	0.105E	0.105E		0.105E 0.105		0.135E 0.105	0.164E 0.105	0.164E 0.135	0.135	0.135	0.135	0.135	0.135Z	0.135Z	0.164Z	0.164Z
	Nominal	Diameter in.		12	15	18	21	24	30	36	42	48	54	09	99	72	78	84	6	96	102	108	114	120

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

ű.	FOR THE RESPECTIVE	SPECTIV		TABLI TER OF PI	TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/ (Metric)	KNESS OF	CORRUGA S OVER TH (Metric)	SATED ALUI THE TOP OF	MINUM AI THE PIP	TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE 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	RUGATIO	SZ
	Type 1	t 9	Tyf	Type 2	Typ	Type 3	Tyį	Type 4	Ty	Type 5	Type 6	9 €	Type 7	e 7
Norimina	Fill Height:	eight:	HIEL	Fill Height:	Ť	Fill Height:	Ē	Fill Height:		Fill Height:	Fill Height:	ight:	Fill Height	sight:
Diameter in.	1 m and less 0.3 m min. cover	id less n. cover	Greater not exce	Greater than 1 m not exceeding 3 m	Greater than 3 m not exceeding 4.5	Greater than 3 m not exceeding 4.5 m	Greater t not exce	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	han 9 m ing 10.5 m
	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	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm
300	1.52		1.52		1.52		1.52		1.52		1.52		1.52	
375	1.52		1.52		1.52		1.52		1.52		1.52		1.52	
450	1.52		1.52		1.52		1.52		1.52		1.52		1.91	
525	1.91E		1.52		1.52		1.52		1.52		1.91		1.91E	
009	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		2.67E		2.67E	
006	2.67E		1.91		1.91		1.91		2.67		2.67E		2.67E	
1050	2.67E	1.52	2.67	1.52	2.67	1.52	2.67	1.52	2.67	1.52	2.67E	2.67	2.67E	2.67E
1200	2.67E	2.67	2.67	1.52	2.67	1.52	2.67	1.52	2.67	2.67	2.67E	2.67E	3.43€	3.43E
1350	2.67E	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	4.17E	3.43E
1650	4.17E	2.67	4.17	1.52	4.17	1.52	4.17	2.67	4.17	3.43	4.17E	3.43€		3.43E
1800	4.17E	3.43	4.17	1.52	4.17	2.67	4.17	2.67	4.17	3.43		3.43⊑		4.17E
1950		3.43		1.91		2.67		3.43		3.43		3.43E		4.17E
2100		3.43		2.67		2.67		3.43		3.43		4.17E	*******	4.17E
2250		3.43		2.67		2.67		3.43		3.43		4.17E		4.17E
2400		3.43		2.67		2.67		3.43		4.17		4.17E		
2550		3.43Z		3.43		3.43		3.43		4.17		4.17E		
2700		3.43Z		3.43		3.43		3.43		4.17				
2850		4.17Z		4.17		4.17		4.17		4.17				
3000		4.17Z		4.17		4.17		4.17		4.17				

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.

			Tab	ole IIA: FC	A: THICKNI FOR THE R	ESS FC (ESPEC	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	ATED S	TEEL P Rouni	IPE ARC	CHES A? YF PIPE	ND COR	RUGAT? .L HEIGI	ED ALU	MINUM.	ALLOY F TOP OF	IPE AR	CHES				
	Corrugated	pale	Corrugated	l						Type 1		7			Type 2					Type 3		
	Steel & Aluminum	⊗ §	Steel & Aluminum		Steel	ugated teel	Min.		ഥ	Fill Height:	ريا			E	Fill Height:				Щ.	Fill Height	ند	
Equivalent Round Size in.	Pipe Arch 2 2/3" x 1/2"	rich 1/2"	Pipe Arch 3" x 1"		5 × 1	<u> </u>			63	3' and less	v		Grea	ter than	3' not ex	Greater than 3' not exceeding 10'	10,	Great	ter than	10' not e	Greater than 10' not exceeding 15'	15.
•	Chan	Qie	Coan	G.	neus	Q q s	Stopl&		Steel		Aluminum	mon		Steel		Aluminum	m Ju		Steel		Aluminum	m G
	(ju)	(in.)	(in.)	(in.)	(in.)	(in.)	Aluminum	2 2/3" x 1/2"	3"x1"	5" x 1"	2 2/3" x 1/2"	3"x1"	2 2/3" x 1/2"	3"x1"	5" x 1"	2 2/3" x 1/2"	3"x1"	3"x1" 2 2/3" x	3"x1"	5" × 1"	2 2/3" x 1/2"	3"x1"
15	17	13					16"	0.079			090'0		0.079			090.0		0.079			090.0	
18	21	15					1-6"	0.109			090'0		0.079			090.0		0.079			090.0	
21	24	18					1:-6"	0.109			0.060		0.079			0.060		0.079			090.0	
24	28	20					16"	0.109			0.075		0.079			0.075		0.079			0.075	
30	35	24					16"	0.109			0.075		0.079			0.075		0.109		•	0.075	
36	42	29					16"	0.108			0.105		0.079			0.105		0.109			0.105	
42	49	33					1:-6"	0.109			0.105		0.109			0.105		0.109			0.105	
48	25	38	33	4	53	41	1-6"	0.109	0.079	0.109	0.135	090.0	0.109	0.079	0.109	0.135	0.060	0.100	0.079	0.109	0.135	090.0
54	64	43	9	46	09	46	1:-6"	0.109	0.109	0.109	0.135	090.0	0.109	0.079	0.109	0.135	0.060	0.109	0.079	0.109	0.135	0.060
09	1.1	47	99	51	99	51	1:-6"	0.138	0.109	0.109	0.164	0.060	0.138	0.079	0.109	0.164	090.0	0.138	0.109	0.109	0.164	090.0
99	11	25	23	22	73	છ	16"	0.168	0.109	0.109		0.105	0.168	0.079	0.109	_	0.075	0.168	0.109	0.109		0.105
72	83	25	81	59	81	23	1:-6"	0.168	0.109	0.109		0.105	0.168	0.079	0.109		0.105	0.168	0.109	0.109		0.105
7.8			87	63	87	63	1-6"		0.109	0.109		0.105		0.079	0.109		0.105		0.109	0.109		0.105
84			92	29	92	- 29	1-6"		0.109	0.109		0.105		0.109	0.109		0.105		0.109	0.109		0.105
90			103	7.1	103	71	1:-6"		0.109	0.109		0.135		0.109	0.109		0.135		0.109	0.109		0.135
96			112	75	112	22	1.6"		0.109	0.109		0.164		0.109	0.109		0.164		0.109	0.109		0.164
102			117	79	117	62	e 		0.109	0.109		0.164		0.109	0.109		0.164		0.109	0.109		0.164
108			128	83	128	83	1-6"		0.138	0.138				0.138	0.138				0.138	0.138		
114			137	87	137	87	1-6"		0.138	0.138				0.138	0.138				0.138	0.138		
120			142	91	142	91	1,-6"		0.168	0.168				0.168	0.168		\exists	\neg	0.168	0.168		

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

				Table	IIA: THICKI FOR THE	HCKNE THE RE	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)	CORRUG FE EQUIN	ATED S	TEEL PIPI ROUND S	E ARCHE SIZE OF P (Metric)	ES AND (SORRUG FILL HI	SATED A	LUMINUA OVER TH	1 ALLOY E TOP C	PIPE AR	CHËS				
		┢		- 3						Type 1					Type 2					Type 3		
Fornivalent	~ ~		Corrugated Steel & Aluminum		Corrugated Steel	ated 15	Min.		_	Fill Height:				_	Fill Height:				ш,	Fill Height		
Round Size	Pipe Arch 68 x 13 mm		Pipe Arch 75 x 25 mm		125 x 25 mm	E E			~	1 m and less	v		Grea	ter than	Greater than 1 m not exceeding 3 m	ceeding	3 31	Greate	er (han 3	Greater than 3 m not exceeding 4.5 m	eeding 4	m Si
ímil.	Cnan	gia	Cons	Dieo	near	g	2 look		Steel		Aluminum	mum		Steel		Aluminum	mnu		Steel		Aluminum	mnu
								68 x 13 mm	75 x 25 mm	68 x 13 75 x 25 125 x 25 mm mm	68 x 13 75 x 25 mm mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 75 x 25 125 x 25 68 x 13 75 x 25 mm mm mm mm	68 x 13 mm		68 x 13 mm	75 x 25 mm	68 x 13 75 x 25 125 x 25 mm	68 x 13 75 x 25 mm mm	75 x 25 mm
375	430	330		!			0.5 m	2.01			1.52		2.01			1.52		2.01			1.52	
450	230	380					0.5 m	2.77			1.52		2.01			1.52		2.01			1.52	
525	610	460					0.5 m	2.77			1.52		2.01			1.52		2.01			1.52	
009	710	510					0.5 m	2.77			1.91		2.01			1.91		2.01			1.91	
750	870	630					0.5 m	2.77			1.91		2.01			1.91		2.77			1.91	
900	1060	740					0.5 m	2.77			2.67		2.01			2.67		2.77			2.67	
1050	1240	840					0.5 m	2.77			2.67		2.77			2.67		2.77			2.67	
1200	1440	970 1	1340	1050	1340 1	1050	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	2.01	2.77	3.43	1.52
1350	1620 1	1100	1520	1170 1	1520 1	1170	0.5 m	2.77	2.77	2.77	3.43	1.52	2.77	2.01	2.77	3.43	1.52	2.77	2.01	2.77	3.43	1.52
1500	1800 1	1200	, 0291	1300	1670 1	1300	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	2.77	2.77	4.17	1.52
1650	1950 1	1320 1	1850	1400 1	1850 1	1400	0.5 m	4.27	2.77	2.77		2.67	4.27	2.01	2.77		1.91	4.27	2.77	2.77		2.67
1800	2100 1	1450 2	2050	1500 2	2050 1	1500	0.5 m	4.27	2.77	2.77		2.67	4.27	2.01	2.77		2.67	4.27	2.77	2.77		2.67
1950		.1	. 0022	1620 2	2200 1	1620	0.5 m		2.77	2.77		2.67		2.01	2.77		2.67		2.77	2.77		2.67
2100		.,	2400 `	1720 2	2400 1	1720	0.5 m		2.77	2.77		2.67		2.77	2.77		2.67		2.77	2.77		2.67
2250		,7	2600	1820 2	2600 1	1820	0.5 m		2.77	2.77		3.43		2.77	2.77		3.43		2.77	2.77		3.43
2400		4	2840	1920 2		1920	0.5 m		2.77	2.77		4.17		2.77	2.77		4,17		2.77	2.77		4.17
2550		• • •	2970	2020 2	2970 2	2020	0.5 m		2.77	2.77		4.17		2.77	2.77		4.17		2.77	2.77		4.17
2700		ري	3240 2	2120 3	3240 2	2120	0.5 m		3.51	3.51				3.51	3.51				3.51	3.51		
2850		.,	3470 ;	2220 3	3470 2	2220	0.5 m		3.51	3.51				3.51	3.51				3.51	3.51		
3000		\dashv	3600	2320 3	3600 2	2320	0.5 m		4.27	4.27		\exists		4.27	4.27				4.27	4.27		

Notes:
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.

Table IIB: CLAS FOR THE RES	SSES OF REIN	VFORCED (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	TICALL AN	ND REINFOF FILL HEIGH	CED CON	CRETE AR THE TOP C	CH PIPE)F PIPE	
Doinforced				Typ	Type 1	Typ	Type 2	Tyr	Type 3
Concrete Concrete Concrete (in.)	forced crete ipe (in.)		Minimum Cover	Fill H 3' ar	Fill Height: 3' and less	Fill Height: Greater than 3' r exceeding 10'	Fill Height: Greater than 3' not exceeding 10'	Fill H Greater th exceed	Fill Height: Greater than 10' not exceeding 15'
Rise Span Rise	Rise		RCCP HE & A	뮢	Arch	里	Arch	H	Arch
14 18 11	1		1, -0.,	H-H	A-111	HE-III	A-III	HE-IV	A-IV
14 22 13 1/2	13 1/2	~ .	1, o"	HE-II	A-III	H-H	A-III	HE-IV	A-IV
19 26 15 1/2	15 1/2		1, 0,	三 出	H-H	투	A-III	N-1∨	A-IV
19 28 1/2 18	18		1, -0"	HE-III	A-III	HE-II	A-III	HE-IV	A-IV
36 1/4	22 1/2		1, -0.,	HE-III	A-III	HE-III	A-III	∕II-∃H	∕II-A
24 36 1/4 22 1/2	22 1/2		1, -0"	HE-	⊪-∀	≡ H H	A-III	HE-IV	A-IV
29 43 3/4 26 5/8	26 5/8		1, -0	HE-II	A-II	HE-III	A-III	HE-IV	A-IV
34 51 1/8 31 5/16	31 5/1	9	1' -0"	出	A-II	≡- ⊒ 	A-III	HE-IV	A-IV
38 58 1/2 36	36		10"	呈	A-II	HE	A-III	1460	1450
43 65 40	40		1, -0	HE-I	A-II	HE-III	A-III	1460	1460
73	45		1, -0	HE-I	H-H	旱里	H-III	1460	1470
53 88 54	24		1, -0"	H-	H-H	旱里	A-III	1470	1480
58 88 54	54		1, -0	HE-I	A-II	HE-III	A-III	1470	1480

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

	Type 3	eight: an 3 m not ng 4.5 m	Arch	A-IV	A-IV	A-IV	A-IV	A-IV	A-IV	A-IV	A-IV	2	20	20	70	70
, W	Typ	Fill Height: Greater than 3 m nol exceeding 4.5 m	НE	HE-IV	HE-IV	HE-IV	HE-IV	HE-IV	HE-IV	HE-IV	HE-IV	70	70	70	70	20
TE ARCH PIF	e 2	eight: an 1 m not ng 3 m	Arch	H-W	H-A	A-III	A-III	A-III	A-III	A-III	H-H	H-III	H-Ⅲ	⊪-Y	₩-W	₹
ED CONCRET OVER THE	Type 2	Fill Height: Greater than 1 m not exceeding 3 m	HE	HE-III	HE-III	HE-III	HE-III	HE-III	HE-III	HE-III	HE-III	HE-≡	HE-III	HE-III	出	≡ H H
REINFORCE	e 1	Fill Height: 1 m and less	Arch	H-III	⊪-K	⊩ -∀	H-Ⅲ	₩-	∃ -∀	A-II	H-A	H-4	H-H	H-A		H-H
PTICALL AND F PIPE AND F ic)	Type 1	Fill Height: 1 m and les	뿌	HE-III	HE-III	≡	HE-III	HE-III	HE-III	HE-II	HE-1	∓ H	HE⊣	HE-I	HE-I	HE-I
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)		Minimum Cover	RCCP HE & A	m 2.0	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m
REINFORCEI EQUIVALEN		Reinforced Concrete Arch pipe (mm)	Rise	279	343	394	457	572	572	676	795	914	1016	1143	1372	1372
4SSES OF F ESPECTIVE		Reinf Con Arch piţ	Span	457	559	099	724	921	921	1111	1299	1486	1651	1854	2235	2235
able IIB: CL FOR THE R		Reinforced Concrete itical pipe (mm)	Rise	356	356	483	483	559	610	737	864	965	1092	1219	1346	1473
		Reinforced Concrete Elliptical pipe (m	Span	584	584	762	762	864	965	1143	1346	1524	1727	1930	2108	2311
		Equivalent Round Size (mm)		375	450	525	009	989	750	006	1050	1200	1350	1500	1676	1800

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

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
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

	_								_					
		an 4.5 m	СРР	AN	NA	×	¥	ΑN	NA	Ϋ́	NA	ΑĀ	Ν	
	3.4	eding 6	- H	×	×	٧N	×	ΑŽ	×	×	×	×	×	
	Type 4	Fill Height: Greater than 4.5 m, not exceeding 6 m	CPVC	×	×	×	×	×	×	×	×	Ϋ́	ΑĀ	
		H	PVC	×	×	×	×	×	×	×	×	×	×	
		ť.	СРР	Ϋ́	×	×	×	ΑN	NA	×	ΝA	ΑN	ΑN	
3dld 3h		rthan 3 r 4.5 m	CPE	×	NA	ΑN	Ϋ́	NA	AN	Ϋ́	NA	AN	ΑN	
P OF TH	Type 3	leight: Greater than not exceeding 4.5 m	뮙	×	×	Ϋ́	×	N A	Ā	×	×	×	×	
ED THE TO		Fill Height: Greater than 3 m, not exceeding 4.5 m	CPVC	×	×	×	×	×	×	×	×	Ą	Ā	
TABLE IIIA: PLASTIC PIPE PERMITTED DIAMETER AND FILL HEIGHT OVER TH (Metric)		Ħ	PVC	×	×	×	×	×	×	×	×	×	×	
STIC PIPE F FILL HEIGH (Metric)		, C	СРР	ΑA	×	×	×	NA	×	×	×	NA	AA	
PLASTI ND FILI (Me		than 1 n 3 m	CPE	×	×	×	×	NA A	×	×	ΝΑ	NA N	AN	
LE IIIA: AETER A	Type 2	eight: Greater than not exceeding 3 m	PE	×	×	ΑΝ	×	ΝA	×	×	×	×	×	
TAB IPE DIAN		Fill Height: Greater than 1 m, not exceeding 3 m	CPVC	×	×	×	×	×	×	×	×	AA	Ϋ́	
TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE (Metric)		置	PVC	×	×	×	×	×	×	×	×	×	×	
			CPP	Α̈́	×	×	×	AN	×	×	×	AN	×	
		and less cover	CPE	×	×	×	×	Ϋ́	×	×	×	×	×	
	Type 1	Il Height: 1 m and les with 0.3 m min. cover	PE	×	×	ΑN	×	¥	×	×	×	×	×	
		Fill Height: 1 m and less, with 0.3 m min. cover	CPVC	×	×	×	×	×	×	×	×	ΑĀ	ΝΑ	
			PVC	×	×	×	×	×	×	×	×	×	×	
		Nominal	Diameter · (mm)	250	300	375	450	525	900	750	900	1000	1200	Notes:

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 Polypthylene (PE) pipe with a smooth interior
CPP Corrugated Polypropylene (CPP) 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

		Type 7	Fill Height: Greater than 30', not exceeding 35'										
	THE PIPE		Fill Height: Gre	CPVC	××	×	×	×	×	×	×	NA	Ä
RMITTED	OVER THE TOP OF		Fill Height: Greater than 25', not exceeding 30'										
STIC PIPE PE	FILL HEIGHT	Type 6	reater than 25'	CPVC	××	×	×	×	×	×	×	NA	¥
TABLE IIIB: PLASTIC PIPE PERMITTED	IAMETER AND		Fill Height: G	PVC	××	×	×	×	×	×	×	×	×
 -	FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE	5	ап 20', not exceeding 25'										
		Type 5	Fill Height: Greater than	CPVC	××	×	×	×	X	×	×	NA	Ϋ́
			Fill Height:	PVC	××	<×	×	×	×	×	×	×	×
			Nominal Diameter	(in.)	9 5	1 5	. 62	21	24	30	36	42	48

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

E PIPE	Type 7	Fill Height: Greater than 9 m, not exceeding 10.5 m	CPVC	×	×	×	×	×	×	×	×	NA	NA
ED THE TOP OF THE													
TABLE IIIB: PLASTIC PIPE PERMITTED DIAMETER AND FILL HEIGHT OVER THI (metric)	Туре б	Fill Height: Greater than 7.5 m, not exceeding 9 m	<u>့</u>										_
PLASTIC PI AND FILL HE (metric)	'	Greater th	CPVC	×	×	×	× _	×	×	× _	×	NA	AN
TABLE IIIB: : DIAMETER A		Fill Height:	PVC	×	×	×	×	×	×	×	×	×	×
TABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE (metric)		, not exceeding 7.5 m											
	Type 5	Fill Height: Greater than 6 m, not	CPVC	×	×	×	×	×	×	×	×	NA	ΑĀ
		Fill Height: G	PVC	×	×	×	×	×	×	×	×	×	×
		Nominal	(mm)	250	300	375	450	525	009	750	006	1000	1200

Notes: PVC CPVC PE X NA

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"

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 as recommended by the manufacturer of the pipe to be loaded. The manufacturer's recommendations shall be provided in writing."

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:

"Item	Article Section
(a) Clay Sewer Pipe	1040.02
(b) Extra Strength Clay Pipe	
(c) Concrete Sewer, Storm Drain, and Culvert Pipe	
(d) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	1042
(e) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe (Note	
(f) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe (Note 1))1042
(g) Polyvinyl Chloride (PVC) Pipe	
(h) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior	
(i) Corrugated Polypropylene (CPP) Pipe with Smooth Interior	1040.07
(j) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pipe	∍1056
(k) Mastic Joint Sealer for Pipe (l) External Sealing Band (m) Fine Aggregate (Note 2)	1055
(I) External Sealing Band	1057
(m) Fine Aggregate (Note 2)	1003.04
(n) Coarse Aggregate (Note 3)	1004.05
(o) Reinforcement Bars and Welded Wire Fabric	1006.10
(p) Handling Hole Plugs	
(q) Polyethylene (PE) Pipe with a Smooth Interior	
(r) Corrugated Polyethylene (PE) Pipe with a Smooth Interior	1040.04

Note 1. The class of elliptical and arch pipe used for various storm sewer sizes and heights of fill shall conform to the requirements for circular pipe.

Note 2. The fine aggregate shall be moist.

Note 3. The coarse aggregate shall be wet."

Revise the table for permitted materials in Article 550.03 of the Standard Specifications as follows:

"Class	Materials
Α	Rigid Pipes:
	Clay Sewer Pipe
	Extra Strength Clay Pipe
	Concrete Sewer, Storm Drain, and Culvert Pipe
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
#1000 V	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"
	Corragated Forypropylene (CFF) The with a Officer interior

Replace the storm sewers tables in Article 550.03 of the Standard Specifications with the following:

										_									1							1
			CPP	Ϋ́	×	×	×	¥	×	ΑN	×	ž	×	Ä	Α̈́	AA	×	NA	Α̈́	Ϋ́	NA	NA	ž	¥	Ϋ́	
			CPE	×	×	×	×	A	×	A	×	ΑĀ	AA	A	Ϋ́	AA	¥	AA	AA	A	NA	NA	Α̈́	ΑN	NA	
		3,	PE	×	×	¥ Z	×	¥	×	ΑĀ	×	¥	×	×	×	ΑN	¥	ΑA	ΑA	¥	AA	AA	Ϋ́	Ϋ́	N A	
	2	ater than (ing 10'	CPVC	×	×	×	×	×	×	NA	×	NA	×	Ą	Ä	NA	AA	NA	NA	A A	A	NA	Š	¥	NA	
PIPE	Type 2	Fill Height: Greater than 3 not exceeding 10'	PVC	×	×	×	×	×	×	NA	×	NA	×	×	×	NA A	¥	NA	ΝA	Ϋ́	ΑA	NA	¥	¥	NA	
RED OF THE		Fill He	ESCP	×	×	×	×	×	×	×	×	×	×	×	×	NA	ž	NA	¥	ž	NA	¥	¥	¥	NA	
TH REQUI			CSP	-	_	1	2	2	2	3	က	NA	ΝΑ	¥	¥	NA	¥	NA	ΑA	ž	NA	¥	ž	_ Ž	NA	
STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE			RCCP	AN AN	=	=	=	=		=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	
STORM SEWERS ERMITTED AND S AND FILL HEIGHT			СРР	ΑA	×	×	×	ΑĀ	×	ΑA	×	NA	×	ΑĀ	×	AN	×	NA	NA	¥	NA	A	Α	¥	N.	
STORM PERMITT S AND FII			CPE	×	×	×	×	ž	×	AA	×	NA	×	×	×	AN	ž	ΝA	¥	¥	ΑN	¥	¥	ΑN	NA	
TERIAL F			PE	×	×	NA	×	ž	×	NA	×	NA	×	×	×	ΑĀ	ž	ΝA	ΑĀ	ž	ΑĀ	ΑĀ	¥	ž	NA	90
STOF KIND OF MATERIAL PERMI EN PIPE DIAMETERS AND	1	3' and less imum cover	CPVC	×	×	×	×	×	×	ΑN	×	NA	×	Ą	Ą	NA	ΑN	NA	AN	A A	NA	AN	ΑN	¥	NA	Sower
KIN A GIVEN	Type 1	Fill Height: 3' and less With 1' minimum cove	PVC	×	×	×	×	×	×	NA	×	NA	×	×	×	ΝA	Ϋ́	NA	ΑĀ	Ϋ́	NA	NA	Ϋ́	ΑĀ	NA	rain and
FORA		Fill H With	ESCP	×	×	Ϋ́	ΑĀ	ž	¥	¥	¥	¥	¥	×	×	AN	¥	AA	ΑN	Ϋ́	NA	AN	¥	¥ Z	NA NA NA	1 Storm
			CSP	က	¥	Ą	AA	¥	Ą	¥	¥	¥	AA	Ą	¥	AA	¥	ž	ΑΆ	¥	¥	ΑA	¥	ž	- V	oto Culve
			RCCP	AN	≥	≥	2	=	=	=	≥	=	=	_	=	=	=	=	=	=	=	=		=	_ =	Painforced Concrete Culvert
		Nominal Diameter	<u>:</u>	10	12	15	18	21	24	27	30	33	36	42	48	54	90	99	72	78	84	06	96	102	108	DOCD Dainfor

P. Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Concrete Sewer, Storm drain, and Culvert Pipe Polyvinyl Chloride Pipe
C. Corrugated Polyvinyl Chloride Pipe
P. Extra Strength Clay Pipe
Polyethylene Pipe with a Smooth Interior
Corrugated Polyethylene 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

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Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
Concrete Sewer, Storm drain, and Culvert Pipe
Polyvinyl Chloride Pipe
Corrugated Polyvinyl Chloride 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

																										,
			CPP	ž	ž	×	¥	¥	¥	Ą	¥	¥	¥	¥	Ϋ́	¥	¥	¥	ΑN	Ž	Ϋ́	AN	¥	¥	¥	
			FE	×	×	Ϋ́	×	ž	×	ΑĀ	×	ž	×	×	×	ž	ž	Ϋ́	ΑŅ	Ϋ́	¥	ΑN	Ϋ́	Ϋ́	¥	
		than 15' 20'	CPVC	×	×	×	×	×	×	ΑĀ	×	¥	×	Ϋ́	Ϋ́	ĄZ	Ϋ́	NA	ΝΑ	¥ Z	ΝA	ΝΑ	Ϋ́	¥	Υ Α	
Ш	Type 4	eight: Greater than not exceeding 20'	PVC	×	×	×	×	×	×	ΑĀ	×	¥	×	×	×	Ν	Α	NA	NA	Ϋ́	NA	AA	Ϋ́	ΑĀ	Ϋ́	
THE PIP		Fill Height: Greater than 15' not exceeding 20'	ESCP	×	¥	≱	¥	¥	Ϋ́	ΑĀ	¥	ΑN	Ą	Ϋ́	Ą	NA	ΑĀ	NA	AA	Ϋ́	NA	Ą	¥	¥	ž	
EWERS) AND STRENGTH REQUIRED HEIGHTS OVER THE TOP OF THE PIPE			CSP	33	ž	¥	¥	ž	¥	ΑN	ž	ž	Α×	ź	Α̈́	NA	ž	NA	¥	 Ž	NA	ΝΑ	¥	¥	¥	
RENGTH FOUNDER THE			RCCP	¥	≥	≥	2	≥	≥	2	2	2	۸۱	2	2	Λ	2	N	2	≥	^	1680	1690	1700	1710	
WERS AND STE			СРР	AN	×	×	×	ž	ΑĀ	ΝA	×	ΑN	ΝA	¥	ΝA	NA	¥	NA	NA	¥	NA	NA	Ϋ́	Ϋ́	ΑĀ	
RM S TTEL			CPE	×	¥	ΑA	ΑĀ	Ϋ́	ΑĀ	NA	Ā	AA	NA	Ϋ́	NA	NA	ΑN	NA	NA	ΑN	NA	ΑN	ž	¥	ΑN	
ST IAL PERI TERS AN		٥,	PE	×	×	Ϋ́	×	₹	×	NA	×	Ą	×	×	×	NA	Ϋ́	NA	ΑN	¥	NA	NA	Ϋ́	Ϋ́	Ϋ́	ed
F MATER E DIAME	3	Fill Height: Greater than 10 not exceeding 15'	CPVC	×	×	×	×	×	×	NA	×	ΑĀ	×	Ϋ́	ΑĀ	AN	¥	NA	ΑA	¥	NA	ΑN	Ϋ́	Ϋ́	ΑN	Storm Drain, and Sewer Pipe
STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF	Type 3	eight: Greater tha not exceeding 15'	PVC	×	×	×	×	×	×	AA	×	Α̈́	×	×	×	NA	Α	NA	AN	¥	NA	AN	Ϋ́	Ϋ́	Ϋ́	Drain, and
FOR A G		Fill Heig	ESCP	×	×	×	×	¥	¥	¥	ž	Š	ΑĀ	Ϋ́	Ą	ΑΝ	ž	ΑĀ	VΝ	¥	ΑĀ	ΨN	Ϋ́	ž	Α̈́	ert, Storm [
:			dSO	2	2	က	Ą	¥	Ϋ́	NA	ΝĀ	٩	AN	Ϋ́	¥	NA	ΝĀ	NA	NA	Ϋ́	ΑĀ	NA	¥	¥	¥	rete Culve
			RCCP	¥	=	=	=	=	=	=	=	=	=	=	=	Ξ	=	=	=	≡	Ξ	=	=	≥	1360	Reinforced Concrete Culv
		Nominal Diameter	<u>:</u>	10	12	15	18	21	24	27	30	33	36	42	48	54	09	99	72	78	84	06	96	102	108	RCCP Reinfo

Concrete Sewer, Storm drain, and Culvert Pipe

CSPC CSPC CPVC CPE CPE CPE NA

Polyvinyl Chloride Pipe
Corrugated Polyvinyl Chloride Pipe
Extra Strength Clay Pipe
Corrugated Polyvinyl Chloride 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
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.

			_	Π									<u> </u>												
			CPP	Ä	Ä	×	A	Ϋ́	Ϋ́	Ϋ́	Ϋ́	ΑN	ΑN	ΑN	Ϋ́	Ϋ́	ΑN	ΝA	Ϋ́	Ϋ́	ΝA	۸Ņ	Ϋ́	ΝĀ	Ž
			밂	×	×	¥	×	ž	×	¥	×	ΑĀ	×	×	×	Ϋ́	Ϋ́	NA	Ν	Ϋ́	NA.	NA	¥	Ϋ́	¥
		Greater than 4.5 m xceeding 6 m	CPVC	×	×	×	×	×	×	Α̈́	×	NA	×	ž	ž	ΝA	ž	NA	ΑN	ž	ΝA	ΝA	ž	¥	¥
	Type 4	ight: Greater than not exceeding 6 m	PVC	×	×	×	×	×	×	¥	×	Ϋ́	×	×	×	¥	¥	NA	¥ Y	¥	NA	ΑA	¥	¥	Α
THE PIPE		Fill Height: not ex	ESCP	×	¥	NA	ΝΑ	Ą	N A	ΝΑ	ž	NA	MN	Α̈́	AN	NA	Ą	NA	ΝA	¥	ΝA	٧N	ΑĀ	¥	¥
STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE		4	CSP	3	¥	¥	ΑĀ	¥	Ν	Ϋ́	¥	ΑN	NA	Ž	ΑĀ	ΑŃ	ž	NA	NA	ž	NA	ΑĀ	ž	ž	¥
			RCCP	AN	≥	≥	2	≥	Ν	2	≥	2	2	≥	>	^	≥	2	2	≥	^	80	80	80	80
			СРР	ΑN	×	×	×	Ϋ́	NA	ΑN	×	NA	AA	¥	A	NA	AN	NA	NA	Ϋ́	NA	NA	Ž	¥	Ϋ́
			CPE	×	Ϋ́	ΝA	ΑN	ž	NA	ΑN	¥	ΑA	ΑN	ž	¥	ΑM	¥	Ā	AA	¥	NA	Ą	¥	¥	¥
		u	PE	×	×	NA	×	¥	X	Ā	×	NA	×	×	×	ΝA	¥	ΝΑ	¥	¥	NA	Α̈́	¥	Ą	ΑĀ
	3	Greater than 3 m seeding 4.5 m	CPVC	×	×	×	×	×	×	ΑN	×	NA	×	₹ Z	Ϋ́	NA	Ϋ́	NA	ΝΑ	ž	NA	ΑĀ	Ą Ż	Ϋ́	¥
	Type 3	leight: Greater than not exceeding 4.5 m	PVC	×	×	×	×	×	×	Ā	×	ΝA	×	×	×	NA	¥	NA	NA	¥	NA	NA	Ϋ́	Ϋ́	ΑĀ
		Fill Height: not exc	ESCP	×	×	×	×	Ϋ́	ΑΝ	AA	¥.	AN	AN	¥	Ϋ́	AA	∀ Z	AA	ΑN	Ϋ́	AA	AN	₹	Ϋ́	¥
			CSP	2	7	က	ΑN	Ϋ́Z	Ν	ΑĀ	¥	ΑĀ	ΑΝ	¥Z	₹ Z	¥	¥	NA	AA	Ą.	AA	NA	Ϋ́	₹	Ϋ́
			RCCP	AM	Ξ	=	≡	=	=	=	=	=	=	=	=	=	=	=	=	=	Ξ	=	=	≥	20
		250	300	375	450	525	009	675	750	825	006	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700		

NOTE NOTE NOTE NOTE NOTE

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
Concrete Sewer, Storm drain, and Sewer Pipe
Conrede Sewer, Storm drain, and Culvert Pipe
Polyvinyl Chloride Pipe
Extra Strength Clay Pipe
Extra Strength Clay Pipe
Polyethylene Pipe with a Smooth Interior
Corrugated Polyethylene Pipe with a Smooth Interior
Corrugated Polyethylene 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 metric D-load to produce a 25.4 micro-meter crack.

							_	_						******						_							
STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE	Type 7	Greater than	not exceeding 35'	CPVC	×	×	×	×	×	×	NA	×	NA	×	Ϋ́	NA	AN	¥	NA	AN	Ą	AA	AN	Ϋ́	AA	NA	
	ЖL	Fill Height: Greater than	not exce	RCCP	A	>	>	۸	>	^	>	>	>	۸	>	>	^	>	۸	۸	2730	2740	2750	2750	2760	2770	
		r than 25'	2	CPVC	×	×	×	X	×	×	AN	×	A'A	×	Ϋ́	ΝΑ	AN	ΑN	NA	NA	ž	ΑΝ	WW	¥	Ϋ́	A A	
	Type 6	Fill Height: Greater than 25'	a la	PVC	×	×	×	×	×	×	ΝA	×	NA	X	×	×	ΝA	Ϋ́	NA	ΑĀ	ΑN	NA	ΝA	¥	ΑN	NA	ouig so
		Fill Heigh	<u> </u>	RCCP	AA	>	>	^	>	>	>	>	>	۸	>	>	^	>	^	^	2370	2380	2390	2400	2410	2410	Sand Course Ding
		than 20'	2	CPVC	×	×	×	×	×	×	ΑN	×	ΑN	×	Ϋ́	Ą	NA	Ϋ́	Ν	AN	Ϋ́	Ϋ́	NA	۷	A A	Ϋ́	Charge Death
	Type 5	Fill Height: Greater than 20'	Simpany	PVC	×	×	×	×	×	×	NA	×	NA	×	×	×	ΝA	۲	ΝA	ΑN	Α̈́	AA	NA	Ϋ́	ΑĀ	Ϋ́	L
		Fill Height	not e	RCCP	ΑĀ	≥	≥	2	≥	≥	2	≥	≥	2	≥	≥	Λ	2	2	۸	2020	2020	2030	2040	2050	2060	Total Concession
FOI		Nominal	Diameter in.		10	12	15	18	21	24	27	30	33	36	42	48	54	90	99	72	78	84	06	96	102	108	

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
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.
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. RCCP PVC CPVC ESCP X NA Note

STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE	Type 7	Fill Height: Greater than	not exceeding 35'	CPVC	×	×	×	×	×	×	AN	×	NA	×	Υ N	NA	NA AN	A A	AA	NA A	¥ ×	NA	A A	ΑN	Ϋ́	NA	
	L	Fill Heigh	notex	RCCP	ΑN	>	>	>	>	>	۸	>	>	۸	>	>	^	>	>	>	130	130	130	130	130	130	
		er than	30,	CPVC	×	×	×	×	×	×	AN	×	AN	×	ΑΝ	ΑN	ΑN	Υ Σ	ΑN	Ϋ́	Υ Ζ	NA	Ϋ́ V	Ā	¥ Z	NA	
	Type 6	Fill Height: Greater than	not exceeding 30'	PVC	×	×	×	×	×	×	ΝΑ	×	NA	×	×	×	ΑN	¥	Ϋ́	¥ X	¥	NA	Ϋ́	A A	ž	NA	ver Pipe
		HIIIH	ou	RCCP	ΑΝ	>	>	>	>	>	>	>	>	۸	>	>	>	>	>	>	110	110	110	120	120	120	ain, and Sev
		er than	25	CPVC	×	×	×	×	×	×	Ą	×	NA	×	Ϋ́	Ϋ́	NA	Α̈́	NA	₹	Ϋ́	NA	¥N —	₹	ž	NA	. Storm Dra
	Type 5	Fill Height: Greater than	20 not exceeding 25°	PVC	×	×	×	×	×	×	₹	×	¥	×	×	×	ΑÑ	Υ Υ	NA	¥ V	¥ Z	NA	۷N	¥ Z	Ϋ́	NA	ete Culvert
		FIII Hei	not	RCCP	ΑZ	≥	≥	≥	2	2	2	≥	≥	2	2	≥	2	2	2	>	100	100	100	100	9	100	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
FO		Nominal	Diameter in.		250	300	375	450	525	009	675	750	825	006	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	RCCP Reinfo

RCCP PVC CPVC X NA Note

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
Polyvinyl Chloride Pipe
Corrugated Polyvinyl Chloride Pipe
Extra Strength Clay 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."

PAYROLLS AND PAYROLL RECORDS (BDE)

Effective: January 1, 2014

<u>FEDERAL AID CONTRACTS</u>. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

"STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, the worker's address, the worker's telephone number when available, the worker's social security number, the worker's classification or classifications, the worker's gross and net wages paid in each pay period, the worker's number of hours worked each day, the worker's starting and ending times of work each day. However, any Contractor or subcontractor who remits contributions to a fringe benefit fund that is not jointly maintained and jointly governed by one or more employers and one or more labor organization must additionally submit the worker's hourly wage rate, the worker's hourly overtime wage rate, the worker's hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable.

The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work, except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted to the Engineer. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form."

<u>STATE CONTRACTS</u>. Revise Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

"IV. COMPLIANCE WITH THE PREVAILING WAGE ACT

- 1. Prevailing Wages. All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the Contractor will not be allowed additional compensation on account of said revisions.
- 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 at a location within the State, during reasonable hours, for inspection by the Department or the Department of Labor; and Federal, State, or local law enforcement agencies and prosecutors.

3. Submission of Payroll Records. The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work, except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted to the Engineer. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form.

Each submittal shall be accompanied by a statement signed by the Contractor or subcontractor, or an officer, employee, or officer thereof, which avers that: (i) he or she has examined the records and such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required by the Act; and (iii) the Contractor or subcontractor is aware that filing a payroll record that he/she knows to be false is a Class A misdemeanor.

4. Employee Interviews. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor."

PORTLAND CEMENT CONCRETE EQUIPMENT (BDE)

Effective: November 1, 2013

Add the following to the first paragraph of Article 1103.03(a)(5) of the Standard Specifications to read:

"As an alternative to a locking key, the start and finish time for mixing may be automatically printed on the batch ticket. The start and finish time shall be reported to the nearest second."

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).

RAILROAD PROTECTIVE LIABILITY INSURANCE (BDE)

Effective: December 1, 1986

Revised: January 1, 2006

Description. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications. A separate policy is required for-each-railroad-unless-otherwise-noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
NDIANA Harbor belt 2721 161ST STREET Hammond, IN 46323	Ø	Approximately 2 Trains per week Speed Varies between 3-6mph
2001 514	~. ~	10

DOT/AAR No.: 326740 H RR Division: SYSTEM

RR Mile Post: 36.82 RR Sub-Division: -

For Freight/Passenger Information Contact: Jim Sheppard For Insurance Information Contact: NAVE GlideWELL

Phone: 219-989-6737 Phone: 219 - 989 - 4916

DOT/AAR No.: RR Division:

RR Mile Post: RR Sub-Division:

For Freight/Passenger Information Contact:

For Insurance Information Contact:

Phone: Phone:

Approval of Insurance. The original and one certified copy of each required policy shall be submitted to the following address for approval:

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

The Contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Engineer evidence that the required insurance has been approved by the railroad(s). The Contractor shall also provide the Engineer with the expiration date of each
required policy. Basis of Payment. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.
3426

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 right-of-way limits may be chipped or shredded and placed as mulch around landscape plantings within the right-of-way when approved by the Engineer. Chipped or shredded material to be placed as mulch shall not exceed a depth of 6 in. (150 mm)."

TRACKING THE USE OF PESTICIDES (BDE)

Effective: August 1, 2012

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

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

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.

WARM MIX ASPHALT (BDE)

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

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

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

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

Materials.

Add the following to Article 1030.02 of the Standard Specifications.

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

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

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

Equipment.

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

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

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

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

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

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

- "(e) Warm Mix Technologies.
 - (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
 - (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification.

Production.

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

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

Quality Control/Quality Assurance Testing.

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

	Frequency of Tests	Frequency of Tests	Test Method
Parameter	High ESAL Mixture Low ESAL Mixture	All Other Mixtures	See Manual of Test Procedures for Materials
Aggregate Gradation	1 washed ignition oven test on the mix per half day of production	1 washed ignition oven test on the mix per day of production	Illinois Procedure
% passing sieves: 1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 μm) No. 200 (75 μm)	Note 4.	Note 4.	
Note 1.			
Asphalt Binder Content by Ignition Oven	1 per half day of production	1 per day	Illinois-Modified AASHTO T 308
Note 2. VMA	Day's production	N/A	Illinois-Modified
	≥ 1200 tons:	.,,,,	AASHTO R 35
Note 3.	1 per half day of production		
	Day's production < 1200 tons:		
	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)		
Air Voids Bulk Specific	Day's production ≥ 1200 tons:	1 per day	Illinois-Modified
Gravity of Gyratory Sample	1 per half day of production	, , , , , ,	AASHTO T 312
Note 5.	Day's production < 1200 tons:		
	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)		
Maximum Specific Gravity of Mixture	Day's production ≥ 1200 tons:	1 per day	Illinois-Modified AASHTO T 209
	1 per half day of production		
	Day's production < 1200 tons:		
	1 per half day of production for first 2 days and 1 per		

	Frequency of Tests	Frequency of Tests	Test Method
			See Manual of
Parameter	High ESAL Mixture	All Other Mixtures	Test Procedures
	Low ESAL Mixture		for Materials
	day thereafter (first		
	sample of the day)		

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

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

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

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

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

Construction Requirements.

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

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

Basis of Payment.

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

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

The Contractor shall provide a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used on the jobsite; or used for the delivery and/or removal of equipment/material to and from the jobsite. The jobsite shall also include offsite locations, such as plant sites or storage sites, when those locations are used solely for this contract.

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

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within $\ensuremath{\textit{IOO}}$ working days.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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

ATTACHMENTS

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

I. GENERAL

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

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

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

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

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

II. NONDISCRIMINATION

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

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

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

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

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

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:
 - "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or onthe-job training."
- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

- **3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If

the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- **7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

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

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
 - a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

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

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

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

IV. Davis-Bacon and Related Act Provisions

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

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

1. Minimum wages

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

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

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

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

2. Withholding

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

action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose Wage and Hour Division Web http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
 - d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- **9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such

contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees:
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
 - (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more — as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded,"

as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with

commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the

certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

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

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.