If you plan to submit a bid directly to the Department of Transportation

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 that 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.

REQUESTS FOR AUTHORIZATION TO BID

Contractors downloading and/or ordering CD-ROM's and are 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 124INT) and the ORIGINAL, signed and notarized, "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.

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.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID? When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status" (BDE 124INT) 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 a Proposal Denial and/or Authorization Form, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Proposal Denial and/or Authorization Form will indicate the reason for denial.

ABOUT AUTHORIZATION TO BID: Firms that have not received an authorization form within a reasonable time of complete and correct original document submittal should contact the department as to status. This is critical in the week before the letting. These documents must be received three days before the letting date. 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 contractor'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 will be placed with the contract number. 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 server e-mails are an added courtesy the Department provides. It is suggested that bidder check IDOT's website http://www.dot.il.gov/desenv/delett.html before submitting final bid information.

IDOT is not responsible for any e-mail related failures.

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

Technical Questions about downloading these files may be directed to Tim Garman (217)524-1642 or garmantr@dot.il.gov.

WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?: Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

- 1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
- 2. Other special documentation and/or information that may be required by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

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

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding	Call
Prequalification and/or Authorization to Bid	(217)782-3413
Preparation and submittal of bids	(217)782-7806
Mailing of plans and proposals	(217)782-7806
Electronic plans and proposals	(217)524-1642

ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

Planholders should verify that they have received and incorporated the addendum and/or revision prior to submitting their bid. Failure by the bidder to include an addendum could result in a bid being rejected as irregular.

56

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAI

See instructions inside front cover)

Proposal Submitted By	
Name	
Address	
City	

Letting September 21, 2007

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. (SEE INSTRUCTIONS ON THE INSIDE OF COVER)

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



Springfield, Illinois 62764

Contract No. 83961
DUPAGE County
Section 00-00115-00-BR (Naperville)
Route FAU 1545 (Bailey Road)
Project BHM-8003(343)
District 1 Construction Funds

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

Prepared by

F

Checked by

(Printed by authority of the State of Illinois)

INSTRUCTIONS

ABOUT IDOT PROPOSALS: All proposals issued by IDOT are potential bidding proposals. Each proposal contains all Certifications and Affidavits, a Proposal Signature Sheet and a Proposal Bid Bond required for Prime Contractors to submit a bid after written **Authorization to Bid** has been issued by IDOT's Central Bureau of Construction.

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. To request authorization, a potential bidder <u>must complete and submit Part B of the Request for Authorization to Bid/or Not For Bid Status form (BDE 124 INT) and submit an original Affidavit of Availability (BC 57).</u>

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Request for Proposal Forms and Plans" 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 a Proposal Denial and/or Authorization Form, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Proposal Denial and/or Authorization Form will indicate the reason for denial. If a contractor has requested to bid but has not received a Proposal Denial and/or Authorization Form, they should contact the Central Bureau of Construction in advance of the letting date.

WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?: Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

- 1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
- 2. Other special documentation and/or information that may be required by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

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

Call

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding

Prequalification and/or Authorization to Bid	217/782-3413
Preparation and submittal of bids	217/782-7806
Mailing of CD-ROMS	217/782-7806



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1.	Proposal of
Та	xpayer Identification Number (Mandatory) for the improvement identified and advertised for bids in the Invitation for Bids as:
	Contract No. 83961 DUPAGE County

Contract No. 83961
DUPAGE County
Section 00-00115-00-BR (Naperville)
Project BHM-8003(343)
Route FAU 1545 (Bailey Road)
District 1 Construction Funds

Project consists of a complete Superstructure replacement and substructure widening with concrete bridge approach slabs, storm sewer replacement, HMA pavement surfacing, curb and gutter removal and replacement, sidewalk removal and replacement, pavement markings, installation of a duct bank and vault package and all incidental work necessary to complete the work on FAU Route 1545 (Bailey Road) over the West Branch of the DuPage River in the City of Naperville.

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

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

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

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

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

The amount of the proposal guaranty check is	\$(). If this proposal is accepted
and the undersigned shall fail to execute a contract bond as required herein, it i	s hereby agreed that the amount	of the proposal guaranty shall become
the property of the State of Illinois, and shall be considered as payment of dama	ages due to delay and other cause	es suffered by the State because of the
failure to execute said contract and contract bond; otherwise, the bid bond sha	all become void or the proposal g	uaranty check shall be returned to the
undersigned		·

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

BD 354 (Rev. 11/2001)

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

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

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

Schedule of Combination Bids

Combination		Combination Bid	
No.	Sections Included in Combination	Dollars 0	Cents

- 7. SCHEDULE OF PRICES. The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
- 8. **CERTIFICATE OF AUTHORITY.** The undersigned bidder, if a business organized under the laws of another State, assures the Department that it will furnish a copy of its certificate of authority to do business in the State of Illinois with the return of the executed contract and bond. Failure to furnish the certificate within the time provided for execution of an awarded contract may be cause for cancellation of the award and forfeiture of the proposal guaranty to the State.

STATE JOB #- C-91-062-04 PPS NBR - 1-10118-0000

DUPAGE COUNTY

NAME CODE 043

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 83961

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	1 1 - 11 -	6.000 X		RAISED REF PVT MKR BR	78100105
	- 11 —	20.000 X	EACH	RAISED REFL PAVT MKR	78100100
TOTAL PRICE DOLLARS CTS	UNIT PRICE DOLLARS CENTS	QUANTITY -	MEASURE	PAY ITEM DESCRIPTION	NUMBER

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

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

I. GENERAL

- **A.** Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, 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. By execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances has 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 termination of the contract and the suspension or debarment of the bidder.

II. ASSURANCES

A. 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. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous assurance, and the surety providing the performance bond shall be responsible for the completion of the contract.

B. Felons

1. The Illinois Procurement Code provides:

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

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-10.

C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

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

The current salary of the Governor is \$150,700.00. Sixty percent of the salary is \$90,420.00.

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

D. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

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

E. Inducements

1. The Illinois Procurement Code provides:

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

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

F. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

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

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

G. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, chief procurement officer, State purchasing officer, 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 chief procurement officer.

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

H. Confidentiality

1. The Illinois Procurement Code provides:

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

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

I. Insider Information

1. The Illinois Procurement Act provides:

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

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

III. CERTIFICATIONS

A. 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. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous certification, and the surety providing the performance bond shall be responsible for completion of the contract.

B. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
 - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
 - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government 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, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State shall contain a certification by the contractor that the contractor is not barred from being awarded a contract or subcontract under this Section. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The bidder certifies that it is not barred from being awarded a contract under Section 50.5.

C. Educational Loan

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

D. Bid-Rigging/Bid Rotating

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

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

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

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

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

E. International Anti-Boycott

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

F. Drug Free Workplace

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

G. Debt Delinquency

1. The Illinois Procurement Code provides:

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

The contractor or bidder certifies that it, or any affiliate, is not barred from being awarded a contract under 30 ILCS 500. Section 50-11 prohibits a person from entering into a contract with a State agency 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 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 contractor further acknowledges that the contracting State agency may declare the contract void if this certification is false or if the contractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

H. Sarbanes-Oxley Act of 2002

1. The Illinois Procurement Code provides:

Section 50-60(c).

The contractor 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 for a period of five years prior to the date of the bid or contract. The contractor acknowledges that the contracting agency shall declare the contract void if this certification is false.

I. Addenda

The contractor or bidder certifies that all relevant addenda have been incorporated in to this contract. Failure to do so may cause the bid to be declared unacceptable.

J. Section 42 of the Environmental Protection Act

The contractor certifies in accordance with 30 ILCS 500/50-12 that the bidder or contractor is not barred from being awarded a contract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency 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 contractor acknowledges that the contracting agency may declare the contract void if this certification is false.

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

In accordance with the provisions of Section 30-22 (6) of the Illinois Procurement 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. Executive Order Number 1 (2007) Regarding Lobbying on Government Procurements

The bidder hereby warrants and certifies that they have complied and will comply with the requirements set forth in this Order. The requirements of this warrant and certification are a material part of the contract, and the contractor shall require this warrant and certification provision to be included in all approved subcontracts.

TO BE RETURNED WITH BID

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 Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous disclosure, 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 Illinois Procurement Code provides that all bids of more than \$10,000 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.

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 400 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.

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. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies. **The forms must be included with each bid or incorporated by reference.**

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

Form A: For bidders that have previously submitted the information requested in Form A

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may sign the following certification statement indicating that the information previously submitted by the bidder is, as of the date of signature, current and accurate. The Certification must be signed and dated by a person who is authorized to execute contracts for the bidding company. Before signing this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder signs the Certification, the Bidder should proceed to Form B instructions.

CERTIFICATION STATEMENT

I have determined that the Form A disclosure informaccurate, and all forms are hereby incorporated by forms or amendments to previously submitted for	y reference in this bid. Any necessary additional
(Bidding C	Company)
Name of Authorized Representative (type or print)	Title of Authorized Representative (type or print)
Signature of Autho	prized Representative Date

Form A: For bidders who have NOT previously submitted the information requested in Form A

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 400 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 the second page of 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 \$90,420.00? YES NO
3.	Does anyone in your organization receive more than \$90,420.00 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not 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 \$90,420.00? 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.)
bidding e authorize	answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the 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 sed to execute contracts for your organization. Photocopied or stamped signatures are not acceptable . The person signing can be, but have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.
	swer 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 that is authorized to execute contracts for your company.
bidding e	Identifying Other Contracts & Procurement Related Information Disclosure Form B must be completed for each bid submitted by the state. It must be signed by an individual who is authorized to execute contracts for the bidding entity. Note: Signing the NOT ABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, signed and dated or the bidder considered nonresponsive and the bid will not be accepted.
ongoing	ler shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:
agency p attached and are	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 pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts not to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development ust be included. Bidders who submit Affidavits of Availability are suggested to use Option II.
"See Affi agency p	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 davit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois lending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the of Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.
Bidders	Submitting More Than One Bid
	submitting multiple bids may submit one set of forms consisting of all required Form A disclosures and one Form B for use with all bids. Indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms nce.
	ne bid submitted for letting item contains the Form A disclosures or Certification Statement and the Form B sclosures. The following letting items incorporate the said forms by reference:

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
Disclosure of the information contained in the LCS 500). Vendors desiring to enter into a potential conflict of interest information as solublicly available contract file. This Form a contracts. A publicly traded company matche requirements set forth in Form A. See 1990	a contract with the State of Illinois specified in this Disclosure Form. A must be completed for bids in e y submit a 10K disclosure (or ee Disclosure Form Instructions.	must disclose the financial information and This information shall become part of the excess of \$10,000, and for all open-ended quivalent if applicable) in satisfaction of
DISCLO	OSURE OF FINANCIAL INFORM	IATION
	nare in excess of 5%, or an interest . (Make copies of this form as ned e requirements)	interest in the BIDDER (or its parent) in which has a value of more than \$90,420.00 cessary and attach a separate Disclosure
NAME:		
ADDRESS		
Type of ownership/distributable incom	ne share:	
stock sole proprietorship % or \$ value of ownership/distributable in		other: (explain on separate sheet):
2. Disclosure of Potential Conflicts of In potential conflict of interest relationships ap describe.		
(a) State employment, currently or in t	he previous 3 years, including cont	ractual employment of services. YesNo
If your answer is yes, please answ	er each of the following questions.	
 Are you currently an office Highway Authority? 	r or employee of either the Capitol	Development Board or the Illinois Toll YesNo
currently appointed to or e exceeds \$90,420.00, (60°	ed to or employed by any agency mployed by any agency of the State of the Governor's salary as of 7/employed and your annual salary.	e of Illinois, and your annual salary

3.	 If you are currently appointed to or employed by any agency of the salary exceeds \$90,420.00, (60% of the Governor's salary as of (i) more than 7 1/2% of the total distributable income of your corporation, or (ii) an amount in excess of the salary of the Governor. 	f 7/1/01) are you entitled to receive firm, partnership, association or
4.	If you are currently appointed to or employed by any agency of the salary exceeds \$90,420.00, (60% of the Governor's salary as of or minor children entitled to receive (i) more than 15% in aggregation of your firm, partnership, association or corporation, or (ii) an assalary of the Governor?	f 7/1/01) are you and your spouse ate of the total distributable income
	employment of spouse, father, mother, son, or daughter, including previous 2 years.	contractual employment for services
If your	r answer is yes, please answer each of the following questions.	YesNo
1.	. Is your spouse or any minor children currently an officer or emplo Board or the Illinois Toll Highway Authority?	yee of the Capitol Development YesNo
2.	Is your spouse or any minor children currently appointed to or em of Illinois? If your spouse or minor children is/are currently appoint agency of the State of Illinois, and his/her annual salary exceed Governor's salary as of 7/1/01) provide the name of the spouse of the State agency for which he/she is employed and his/her annual salary exceeds the state agency for which he/she is employed and his/her annual salary exceeds the state agency for which he/she is employed and his/her annual salary exceeds the salary exceed	inted to or employed by any is \$90,420.00, (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 \$90,420.00, as of 7/1/01) are you entitled to receive (i) more than 71/2% of the firm, partnership, association or corporation, or (ii) an amount Governor?	(60% of the salary of the Governor e total distributable income of your
4.	If your spouse or any minor children are currently appointed to constant of Illinois, and his/her annual salary exceeds \$90,420.00, (6 7/1/01) are you and your spouse or any minor children entitled to aggregate of the total distributable income from your firm, partners (ii) an amount in excess of 2 times the salary of the Governor?	0% of the Governor's salary as of receive (i) more than 15% in the ship, association or corporation, or
		Yes No
unit of	re status; the holding of elective office of the State of Illinois, the go local government authorized by the Constitution of the State of Ill currently or in the previous 3 years.	
` '	onship to anyone holding elective office currently or in the previous r daughter.	2 years; spouse, father, mother, YesNo
Americ of the S	ntive office; the holding of any appointive government office of the Sca, or any unit of local government authorized by the Constitution of State of Illinois, which office entitles the holder to compensation in excharge of that office currently or in the previous 3 years.	f the State of Illinois or the statues
` '	nship to anyone holding appointive office currently or in the previou daughter.	us 2 years; spouse, father, mother, YesNo
(g) Emplo	yment, currently or in the previous 3 years, as or by any registered	lobbyist of the State government. YesNo

(h) Relationship to a son, or daughter.	nyone who is or was a registered lobbyist in the previous 2 years; s Yes _	spouse, father, mother, No
committee registe	nployment, currently or in the previous 3 years, by any registered red with the Secretary of State or any county clerk of the State of I registered with either the Secretary of State or the Federal Board o	llinois, or any political
last 2 years by any county clerk of the	nyone; spouse, father, mother, son, or daughter; who was a compey registered election or re-election committee registered with the See State of Illinois, or any political action committee registered with real Board of Elections. Yes _	ecretary of State or any
	APPLICABLE STATEMENT	
This Disclosure Fo	rm A is submitted on behalf of the INDIVIDUAL named on prev	ious page.
Completed by:		
	Name of Authorized Representative (type or print)	
Completed by:		
•	Title of Authorized Representative (type or print)	
Completed by:		
•	Signature of Individual or Authorized Representative	Date
	NOT APPLICABLE STATEMENT	
	hat no individuals associated with this organization meet the tion of this Form A.	criteria that would
This Disclosure Fo	rm A is submitted on behalf of the CONTRACTOR listed on the	e previous page.
	Name of Authorized Representative (type or print)	
	Title of Authorized Representative (type or print)	
	Signature of Authorized Representative	Date

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Procurement Related Information Disclosure

		Disclosure	
Contractor Name			
Legal Address			
City, State, Zip		_	
Telephone Number	Email Address	Fax Number (if available)	
,		, , ,	
	tion contained in this Form is required by the		
·	information shall become part of the publicly		
be completed for bids in ϵ	excess of \$10,000, and for all open-ended co	intracts.	
DISCLOS	SURE OF OTHER CONTRACTS AND PRO	CUREMENT RELATED INFORMATION	
has any pending contra- any other State of Illinoi	ontracts & Procurement Related Informaticts (including leases), bids, proposals, or othes agency: Yes No bidder only needs to complete the signature	er ongoing procurement relationship with	
	 Identify each such relationship by showing sor project number (attach additional pages a 		
	THE FOLLOWING STATEMENT	MUST BE SIGNED	
	Name of Authorized Representativ	e (type or print)	
	Title of Authorized Representative	(type or print)	
	Signature of Authorized Repr	esentative Date	_

SPECIAL NOTICE TO CONTRACTORS

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

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

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



Contract No. 83961 DUPAGE County Section 00-00115-00-BR (Naperville) Project BHM-8003(343) Route FAU 1545 (Bailey Road) District 1 Construction Funds

	District i Construction i unus					
PART I. IDENTIFICATION						
Dept. Human Rights #	Duration of Project:					
Name of Bidder:						
PART II. WORKFORCE PROJECTION A. The undersigned bidder has analyzed minority group and female	populations, unemployment rates and availability of workers for t					

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

TABLE A

TABLE B

		TOTA	AL Wo	rkforce	Projec	tion for	Contr	act					1	(CURRENT		_	S
				MINORITY EMPLOYEES				TRAINEES				TO BE ASSIGNED TO CONTRACT						
JOB CATEGORIES		TAL OYEES	BLACK HISPANIC		*OTHER MINOR.		APPREN- TICES		N- ON THE				TOTAL EMPLOYEES		MINORI ⁻ EMPLOYE			
	М	F	М	F	М	F	М	F	М	F	М	F	İ	М	F		М	F
OFFICIALS (MANAGERS)																		
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		

TABLE C									
TO	TOTAL Training Projection for Contract								
EMPLOYEES IN	_	TAL DYEES	BLACK HISPANIC				*OTHER MINOR.		
TRAINING	M F		М	F	М	F	M	F	
APPRENTICES									
ON THE JOB TRAINEES									

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

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

Note: See instructions on the next page

FOR DEPARTMENT USE ONLY	

Contract No. 83961 DUPAGE County Section 00-00115-00-BR (Naperville) Project BHM-8003(343) Route FAU 1545 (Bailey Road) District 1 Construction Funds

PART II. WORKFORCE PROJECTION - continued

B.		ded in "Total E the undersigne					otal numb	oer of	new h	nires th	at would	be empl	oyed in the
		undersigned bid recruited from or base of ope											nires would (number) r's principal
C.		ded in "Total En signed bidder a											ectly by the
		indersigned bid ectly employed byed by subcon		ates tha	it (number) ntractor an	d that	(number)	·				F	persons will sons will be
PART	III. AFF	FIRMATIVE AC	TION PL	AN									
A.	utiliza in any comm (geard utiliza	undersigned bid tion projection y job category, nencement of ved to the com tion are correct epartment of h	included of and in the work, development of the state of	under P A ne event velop an tages of h Affirm	ART II is determined submit of the control of the c	etermir indersi a writte act) w	ned to be gned bid en Affirm hereby c	an under is native deficie	nderutil award Action encies i	ization ed this Plan i n mino	of minori contract ncluding rity and/	ty persons , he/she v a specifi or female	s or women will, prior to c timetable e employee
B.	submi	undersigned bid itted herein, and part of the cont	nd the goa	als and t	timetable ir								
Comp	any						Т	eleph	one Nu	mber _			
Addre	SS												
					NOTICE	REGA	RDING SIG	GNAT	URE				
	The E	Bidder's signature s to be completed	on the Pr	roposal S ⁄isions ar	ignature Sh e required.	eet will	constitute	the si	gning of	this form	n. The fo	ollowing sig	nature block
	Signa	iture:					Title: _				Da	te:	
Instruct	ions:	All tables must in	nclude subco	ontractor p	ersonnel in a	ddition to	prime con	tractor	personne	el.			
Table A	. -	Include both the (Table B) that wi should include al	II be allocate	ed to cont	ract work, and	d include	all appren	tices a	nd on-the	-job train	ees. The	"Total Emplo	oyees" column
Table B	s -	Include all emplo		ntly employ	ed that will b	e allocat	ed to the co	ontract	work incl	uding any	/ apprentic	es and on-th	ne-job trainees
Table C	; -	Indicate the racia	al breakdowr	n of the tot	tal apprentice	s and on	-the-job trai	inees s	hown in ⁻	Γable A.	ı	BC-1256-Pg	. 2 (Rev. 3/98)

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>CER</u>		TFICATION, EQUAL EMPLOYMENT OPPORTUNITY:								
	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. 83961 DUPAGE County Section 00-00115-00-BR (Naperville) Project BHM-8003(343) Route FAU 1545 (Bailey Road) District 1 Construction Funds

PROPOSAL SIGNATURE SHEET

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

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Firm Name	
(IF A CO-PARTNERSHIP)		
()		
		Name and Address of All Members of the Firm:
	Corporate Name	
	Ву	
(IF A CORPORATION)		Signature of Authorized Representative
,		Typed or printed name and title of Authorized Representative
		Typed of printed name and title of Additionized Representative
	Attest	
(IF A JOINT VENTURE, USE THIS SECTION		Signature
FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)	Business Address	
,		
	Cornerate Name	•
(IF A JOINT VENTURE)	Ву	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	•	
	Attest	Signature
	Business Address	
	32222.1.2 3.000	
If more than two parties are in the joint venture,	please attach an addit	ional signature sheet.



Division of Highways Proposal Bid Bond

(Effective November 1, 1992)

	Item No.
	Letting Date
KNOW ALL MEN BY THESE PRESENTS, That We	
MINOW THE MEN DT THESE TRESERVIS, THAT WE	·
as PRINCIPAL, and	_
as PRINCIPAL, and	
	as SURETY, are
Article 102.09 of the "Standard Specifications for Road and Bridge	NOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in e Construction" in effect on the date of invitation for bids, whichever is the lesser sum, well ent of which we bind ourselves, our heirs, executors, administrators, successors and assigns.
	IS SUCH, That Whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF the improvement designated by the Transportation Bulletin Item Number and Letting Date
the bidding and contract documents, submit a DBE Utilization Plat PRINCIPAL shall enter into a contract in accordance with the term coverages and providing such bond as specified with good and suf labor and material furnished in the prosecution thereof; or if, in the into such contract and to give the specified bond, the PRINCIPAL	proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in that is accepted and approved by the Department; and if, after award by the Department, the sof the bidding and contract documents including evidence of the required insurance ficient surety for the faithful performance of such contract and for the prompt payment of event of the failure of the PRINCIPAL to make the required DBE submission or to enter pays to the Department the difference not to exceed the penalty hereof between the amount Department may contract with another party to perform the work covered by said bid shall remain in full force and effect.
Surety shall pay the penal sum to the Department within fifteen (15	L has failed to comply with any requirement as set forth in the preceding paragraph, then 5) days of written demand therefor. If Surety does not make full payment within such mount owed. Surety is liable to the Department for all its expenses, including attorney's or in part.
In TESTIMONY WHEREOF, the said PRINCIPAL and the	said SURETY have caused this instrument to be signed by their respective officers this A.D.,
PRINCIPAL	SURETY
(Company Name)	(Company Name)
By:	Ву:
(Signature & Title)	(Signature of Attorney-in-Fact)
Notar	y Certification for Principal and Surety
STATE OF ILLINOIS, COUNTY OF	,,,,,
I,	, a Notary Public in and for said County, do hereby certify that
and	
	als signing on behalf of PRINCIPAL & SURETY)
	se names are subscribed to the foregoing instrument on behalf of PRINCIPAL and ed respectively, that they signed and delivered said instrument as their free and voluntary
Given under my hand and notarial seal this day	y of, A.D
My commission expires	
,	Notary Public
	the Principal may file an Electronic Bid Bond. By signing below the Principal is ensuring pal and Surety are firmly bound unto the State of Illinois under the conditions of the bid
Electronic Bid Bond ID# Company/Bidder Name	Signature and Title

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

Name:	
Address:	
Phone No.	

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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

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

Contract No. 83961
DUPAGE County
Section 00-00115-00-BR (Naperville)
Project BHM-8003(343)
Route FAU 1545 (Bailey Road)
District 1 Construction Funds



Illinois Department of Transportation

NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., September 21, 2007. 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. 83961
DUPAGE County
Section 00-00115-00-BR (Naperville)
Project BHM-8003(343)
Route FAU 1545 (Bailey Road)
District 1 Construction Funds

Project consists of a complete Superstructure replacement and substructure widening with concrete bridge approach slabs, storm sewer replacement, HMA pavement surfacing, curb and gutter removal and replacement, sidewalk removal and replacement, pavement markings, installation of a duct bank and vault package and all incidental work necessary to complete the work on FAU Route 1545 (Bailey Road) over the West Branch of the DuPage River in the City of Naperville.

- 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

Milton R. Sees, Acting Secretary

BD 351 (Rev. 01/2003)

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2007

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec.

Page No.

No Supplemental Specifications this year.

RECURRING SPECIAL PROVISIONS

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

<u>CHE</u>		SHEET#	<u> 5 NO</u>
1	X	Additional State Requirements For Federal-Aid Construction Contracts (Eff. 2-1-69) (Rev. 1-1-07)	-1-
2		Subletting of Contracts (Federal-Aid Contracts) (Eff. 1-1-88) (Rev. 5-1-93)	
3	Х	EEO (Eff. 7-21-78) (Rev. 11-18-80)	4
4		Specific Equal Employment Opportunity Responsibilities	
_		Non Federal-Aid Contracts (Eff. 3-20-69) (Rev. 1-1-94)	14
5		Required Provisions - State Contracts (Eff. 4-1-65) (Rev. 1-1-07)	
6	v	Reserved	
7		National Pollutant Discharge Elimination System Permit (Eff. 7-1-94) (Rev. 1-1-03)	25
8	^	In-Stream Work Pads (Eff. 1-2-92) (Rev. 1-1-98)	26
9		Construction Layout Stakes Except for Bridges (Eff. 1-1-99) (Rev. 1-1-07)	27
10	Y	Construction Layout Stakes (Eff. 5-1-93) (Rev. 1-1-07)	
11	^	Use of Geotextile Fabric for Railroad Crossing (Eff. 1-1-95) (Rev. 1-1-07)	
12		Subsealing of Concrete Pavements (Eff. 11-1-84) (Rev. 1-1-07)	
13		Hot-Mix Asphalt Surface Removal (Cold Milling) (Eff. 11-1-87) (Rev. 1-1-07)	
14		Pavement and Shoulder Resurfacing (Eff. 2-1-00) (Rev. 1-1-07)	
15		PCC Partial Depth Hot-Mix Asphalt Patching (Eff. 1-1-98) (Rev. 1-1-07)	
16		Patching with Hot-Mix Asphalt Overlay Removal (Eff. 10-1-95) (Rev. 1-1-07)	
17		Polymer Concrete (Eff. 8-1-95) (Rev. 3-1-05)	
18		PVC Pipeliner (Eff. 4-1-04) (Rev. 1-1-07)	47
19		Pipe Underdrains (Eff. 9-9-87) (Rev. 1-1-07)	48
20		Guardrail and Barrier Wall Delineation (Eff. 12-15-93) (Rev. 1-1-97)	49
21		Bicycle Racks (Eff. 4-1-94) (Rev. 1-1-07)	53
22		Temporary Modular Glare Screen System (Eff. 1-1-00) (Rev. 1-1-07)	55
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25		Night Time Inspection of Roadway Lighting (Eff. 5-1-96)	60
26		English Substitution of Metric Bolts (Eff. 7-1-96)	
27		English Substitution of Metric Reinforcement Bars (Eff. 4-1-96) (Rev. 1-1-03)	
28		Calcium Chloride Accelerator for Portland Cement Concrete (Eff. 1-1-01)	
29		Quality Control of Concrete Mixtures at the Plant-Single A (Eff. 8-1-00) (Rev. 1-1-04)	
30		Quality Control of Concrete Mixtures at the Plant-Double A (Eff. 8-1-00) (Rev. 1-1-04)	
31	Х	Quality Control/Quality Assurance of Concrete Mixtures (Eff. 4-1-92) (Rev. 1-1-07)	78
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GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET Effective: June 1, 2007

1	<u>Pg</u>	<u>File</u>	<u>Title</u>	<u>Effective</u>	Revised
	<u>#</u>	<u>Name</u>			
		GBSP4	Polymer Modified Portland Cement Mortar	June 7, 1994	June 1, 2007
		GBSP11	Permanent Steel Sheet Piling	Dec 15, 1993	Jan 1, 2007
		GBSP12	Drainage System	June 10, 1994	Jan 1, 2007
		GBSP13	High-Load Multi-Rotational Bearings	Oct 13, 1988	Jan 1, 2007
		GBSP14	Jack and Remove Existing Bearings	April 20, 1994	Jan 1, 2007
		GBSP15	Three Sided Precast Concrete Structure	July 12, 1994	June 1, 2007
		GBSP16	Jacking Existing Superstructure	Jan 11, 1993	Jan 1, 2007
		GBSP17	Bonded Preformed Joint Seal	July 12, 1994	Jan 1, 2007
		GBSP18	Modular Expansion Joint	May 19, 1994	Jan 1, 2007
T		GBSP19	Reserved		
		GBSP21	Cleaning and Painting Contact Surface Areas of Existing Steel Structures	June 30, 2003	Jan 1, 2007
X 72	72	GBSP22	Cleaning and Painting New Metal Structures	Sept 13, 1994	Jan 1, 2007
		GBSP25	Cleaning and Painting Existing Steel Structures	Oct 2, 2001	June 1, 2007
		GBSP26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	Feb 2, 2007
\top		GBSP28	Deck Slab Repair	May 15, 1995	Feb 2, 2007
7		GBSP29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	June 1, 2007
		GBSP30	Bridge Deck Latex Concrete Overlay	May 15, 1995	June 1, 2007
十		GBSP31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	June 1, 2007
\top		GBSP32	Temporary Sheet Piling	Sept 2, 1994	Jan 1, 2007
		GBSP33	Pedestrian Truss Superstructure	Jan 13, 1998	Jan 1, 2007
\top		GBSP34	Concrete Wearing Surface	June 23, 1994	Jan 1, 2007
		GBSP35	Silicone Bridge Joint Sealer	Aug 1, 1995	Jan 1, 2007
\mathbf{x}^{\dagger}	79	GBSP36	Surface Preparation and Painting Req. for Weathering Steel	Nov 21, 1997	Feb 2, 2007
	80	GBSP37	Underwater Structure Excavation Protection	April 1, 1995	Jan 1, 2007
		GBSP38	Mechanically Stabilized Earth Retaining Walls	Feb 3, 1999	June 1, 2007
		GBSP42	Drilled Soldier Pile Retaining Wall	Sept 20, 2001	Feb 2, 2007
		GBSP43	Driven Soldier Pile Retaining Wall	Nov 13, 2002	Feb 2, 2007
x^{T}	81	GBSP44	Temporary Soil Retention System	Dec 30, 2002	Jan 1, 2007
		GBSP45	Bridge Deck Thin Polymer Overlay	May 7, 1997	Jan 1, 2007
\top		GBSP46	Geotextile Retaining Walls	Sept 19, 2003	June 1, 2007
		GBSP47	High Performance Concrete Structures	Aug 5, 2002	Jan 1, 2007
+		GBSP49	Reserved	J	
+		GBSP50	Removal of Existing Non-composite Bridge Decks	June 21, 2004	Jan 1, 2007
+		GBSP51	Pipe Underdrain for Structures	May 17, 2000	Jan 1, 2007
\overline{x}	83	GBSP52	Porous Granular Embankment (Special)	Sept 28, 2005	Jan 1, 2007
_	84	GBSP53	Structural Repair of Concrete	Mar 15, 2006	Jan 1, 2007
+	<u> </u>	GBSP55	Erection of Curved Steel Structures	June 1, 2007	
+		GBSP56	Setting Piles in Rock	Nov 14, 1996	Jan 1, 2007
+		GBSP57	Temporary Mechanically Stabilized Earth Retaining Walls	Jan 6, 2003	Jan 1, 2007
+		GBSP58	Mechanical Splice	Sep 21, 1995	Jan 1, 2007
+		GBSP59	Diamond Grinding and Surface Testing Bridge Sections	Dec 6, 2004	Jan 1, 2007
+		GBSP 60	Containment and Disposal of Non-Lead Pain Cleaning Residues	Nov 25, 2004	Jan 1, 2007
- -		GBSP 61	Slipform Parapet	June 1, 2007	

LIST ADDITIONAL SPECIAL PROVISIONS BELOW

INDEX LOCAL ROADS AND STREETS SPECIAL PROVISIONS

	LR#		Page #
LR SD 12		"Slab Movement Detection Device" (Eff. 11/1/84) (Rev. 1/1/07)	
LR SD 13		"Required Cold Milled Surface Texture" (Eff. 11/1/87) (Rev. 1/1/07)	
LR SD 630		"Steel Plate Beam Guardrail" (Eff. 2/1/07). Developed to allow local agencies to continue to use 27" guardrail	
		with 6 inch blockouts.	
LR SD 631		"Traffic Barrier Terminals" (Rev. 2/1/07). Developed to keep Traffic Barrier Terminals Type 1, 2 & 5A as an option for local agencies to use with 27" guardrail with 6 inch blockouts.	
LR SD 633		"Remove and Reerect Steel Plate Beam Guardrail" (Eff. 2/1/07). Developed to allow local agencies to replace	
LR 102		27" guardrail with 6 inch blockouts	
		interested party protest procedures outlined in Title 44 of the IL Administrative Code	
LR 105	X	"Cooperation with Utilities" (Eff 1/1/99) (Rev 1/1/07). Formerly issued as LRS 1 and was reissued as an LR Contract Special Provision based on industry concerns discussed at the Joint Coop.	93-95
LR 107-1		"Nationwide Permit No. 14" (Eff. 2/1/04) (Rev. 3/1/05). Developed to outline the necessary requirements to	
		comply with No. 14 permits.	
LR 107-2		"Railroad Protective Liability Insurance for Local Lettings" (Eff. 3/1/05) (Rev 1/1/06). Developed to require insurance policies to be submitted to the letting agency rather than the department.	
LR 107-3		"Disadvantaged Business Enterprise Participation" (Eff. 1/1/07). Developed to require DBE utilization plans to	
LR 107-3		be submitted to the local agency.	
LR 107-4	Χ	"Insurance" (Rev. 8/1/07). Developed based on recommendations from IACE Policy Committee to ensure	96
LICTOT 4	^	local agencies are indemnified when their projects are on the state letting.	
LR 108		"Combination Bids (Eff. 1/1/94) (Rev. 3/1/05). Developed to allow the revision of working days and calendar	
2.1.100		days. Revised to incorporate applicable portions of deleted Sections 102 & 103.	
LR 212		"Shaping Roadway" (Eff. 8/1/69) (Rev. 1/1/02).	
LR 355-1		"Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix" (Eff. 10/1/73) (Rev. 1/1/07)	
LR 355-2		"Asphalt Stabilized Base Course, Plant Mix" (Eff. 2/20/63) (Rev. 1/1/07)	
LR 400		"Bituminous Treated Earth Surface (Eff. 1/1/07). Developed since Section 401 was eliminated from the 2007 Standard Specifications.	
LR 402		"Salt Stabilized Surface Course" (Eff. 2/20/63) (Rev. 1/1/07)	
LR 402 LR 403-2		Bituminous Hot Mix Sand Seal Coat" (Eff. 8/1/69) (Rev. 1/1/07)	
LR 420		"PCC Pavement (Special)" (Eff. 5/12/64) (Rev. 1/1/07). Developed to allow local agencies to construct quality	
LIN 420		PCC pavements for low volume roads.	
LR 442		"Bituminous Patching Mixtures for Maintenance Use" (Eff 1/1/04) (Rev. 8/1/07). Developed to reference	
LI (1 1 Z		approved bituminous patching mixtures.	
LR 451		"Crack Filling Bituminous Pavement with Fiber-Asphalt" (Eff. 10/1/91) (Rev. 1/1/07)	
LR 503-1		"Furnishing Class SI Concrete" (Eff. 10/1/73) (Rev. 1/1/02)	
LR 503-2		"Furnishing Class SI Concrete (Short Load)" (Eff. 1/1/89) (Rev. 1/1/02). Developed to allow a load charge	
		to be added when short loads are expected during the contract	
LR 542		"Pipe Culverts, Type (Furnished)" (Eff. 9/1/64) (Rev. 1/1/07)	
LR 663		"Calcium Chloride Applied" (Eff. 6/1/58) (Rev. 1/1/07)	
LR 702		"Construction and Maintenance Signs" (Eff 1/1/04) (Rev 6/1/07). Developed to require florescent orange	
		sheeting and a minimum sign size of 48" X 48" on construction and maintenance signs	
LR 1004		"Coarse Aggregate for Bituminous Surface Treatment" (Eff. 1/1/02) (Rev 1/1/07). Developed to provide a	
		coarser mix when aggregate producers have adjusted the CA-16 gradation according to the Aggregate	
. =		Gradation Control System (AGCS) to a finer mix for Hot-Mix Asphalt.	
LR 1013		"Rock Salt (Sodium Chloride)" (Eff. 8/1/69) (Rev. 1/1/02)	
LR 1032-1		"Penetrating Emulsions" (Eff. 1/1/07) (Rev. 2/1/07). Developed to combine Penetrating Emulsified Asphalt and Penetrating Emulsified Prime into a single special provision.	
LR 1032-2		"Multigrade Cold Mix Asphalt" (Eff. 1/1/07) (Rev. 2/1/07). Developed to provide the material specification for	
LI (1002 Z		Multigrade cold mix asphalt.	
LR 1102		"Road Mix or Traveling Plan Mix Equipment" (Eff. 1/1/07). Developed to replace road mix and traveling plant	
		mix bituminous equipment that was eliminated from the Standard Specifications.	

BDE SPECIAL PROVISIONS For the August 3rd and September 21st, 2007 Lettings

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

<u>File Name</u>	Pg#		Special Provision Title	<u>Effective</u>	Revised
80099	ac nonormalisticas		Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2007
* 80186		700	Alkali-Silica Reaction for Cast-in-Place Concrete	Aug. 1, 2007	
80108	97	X_	Asbestos Bearing Pad Removal	Nov. 1, 2003	
72541			Asbestos Waterproofing Membrane and Asbestos Hot-Mix Asphalt	June 1, 1989	Jan. 2, 2007
			Surface Removal		
			(NOTE: This special provision was previously named "Asbestos		
			Waterproofing Membrane and Asbestos Bituminous Concrete Surface		
00470			Removal".)	Nov. 2, 2006	lam 0 0007
80173			Bituminous Materials Cost Adjustments	Nov. 2, 2006	Jan. 2, 2007
50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
50481			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
5049I			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007 Jan. 1, 2007
5053I	00		Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	Jan. 1, 2007
80166	98	X	Cement Digital Tarrain Madeling for Forthwork Calculations	Jan. 1, 2007 April 1, 2007	
80177	101	~	Digital Terrain Modeling for Earthwork Calculations Disadvantaged Business Enterprise Participation	Sept. 1, 2007	Jan. 1, 2007
80029	101	X	Disadvantaged Business Enterprise Participation Dowel Bars	April 1, 2007	Jan. 1, 2007
80178				Jan. 1, 2007	
80167		<u> </u>	Electrical Service Installation – Traffic Signals	April 1, 2007	
80179 80175		-	Engineer's Field Office Type A Epoxy Pavement Markings	Jan. 1, 2007	
* 80189	1084	Х		Aug. 2, 2007	
80180	109		Equipment Rental Rates Erosion and Sediment Control Deficiency Deduction	Aug 2, 2007 April 1, 2007	
* 80168		X			Aug. 1, 2007
80169	. 110	500	High Tension Cable Median Barrier	Jan. 1, 2007	Aug. 11,,2007
80142	113	X	Hot-Mix Asphalt Equipment, Spreading and Finishing Machine	Jan. 1, 2007	Jan. 1, 2007
00142	110	^	(NOTE: This special provision was previously named "Bituminous	Jan. 1, 2005	Jan. 1, 2007
			Equipment, Spreading and Finishing Machine".)		
80181			Hot-Mix Asphalt – Field Voids in the Mineral Aggregate	April 1, 2007	
80136			Hot-Mix Asphalt Mixture IL-4.75	Nov. 1, 2004	April 1, 2007
. 00100			(NOTE: This special provision was previously named "Superpave	1101. 1, 2001	7 (pr. 11 , 2007
			Bituminous Concrete Mixture IL-4.75".)		
80109	114	X	Impact Attenuators	Nov. 1, 2003	Jan. 1, 2007
80110	116	X	Impact Attenuators, Temporary	Nov. 1, 2003	Jan. 1, 2007
* 80187		Χ	Legal Requirements to be Reserved	Aug. 1, 2007	
80045		2000-000-000-00	Material Transfer Device	June 15, 1999	Jan. 1, 2007
80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2007
80082	119	X	Multilane Pavement Patching	Nov. 1, 2002	•
80129			Notched Wedge Longitudinal Joint	July 1, 2004	Jan. 1, 2007
80182	120	X	Notification of Reduced Width	April 1, 2007	
80069			Organic Zinc-Rich Paint System	Nov. 1, 2001	Jan. 1, 2007
80022	121	X	Payments to Subcontractors	June 1, 2000	Jan. 1, 2006
80148			Planting Woody Plants	Jan. 1, 2006	•
80134	123	X	Plastic Blockouts for Guardrail	Nov. 1, 2004	Jan. 1, 2007
80119			Polyurea Pavement Marking	April 1, 2004	Jan. 1, 2007
80170	124	Х	Portland Cement Concrete Plants	Jan. 1, 2007	
80171			Precast Handling Holes	Jan. 1, 2007	
80015			Public Convenience and Safety	Jan. 1, 2000	

File Name	<u>Pg#</u>		Special Provision Title	Effective	<u>Revised</u>
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	**************************************
* 80172	126	Χ	LIE TO COLUMN TO	Jan. 1, 2007	Aug. 1, 2007
80160			Reflective Crack Control Treatment	April 1, 2006	Jan. 1, 2007
80183	132	X	Reflective Sheeting on Channelizing Devices	April 1, 2007	
80151	133	X	Reinforcement Bars	Nov. 1, 2005	Jan. 1, 2007
80164			Removal and Disposal of Regulated Substances	Aug. 1, 2006	Jan. 1, 2007
80184			Retroreflective Sheeting, Nonreflective Sheeting, and Translucent	April 1, 2007	
		50-01-W-00-0	Overlay Film for Highway Signs		
* 80131	135	Х	Seeding	July 1, 2004	Aug. 1, 2007
			(NOTE: This special provision was previously named "Seeding and		
			Sodding".)	N 4 000E	1 4 0007
80152	137	X	Self-Consolidating Concrete for Cast-In-Place Construction	Nov. 1, 2005	Jan. 1, 2007
80132	4.40		Self-Consolidating Concrete for Precast Products	July 1, 2004	Jan. 1, 2007
80127	142	X	Steel Cost Adjustment	April 2, 2004	April 1, 2007
* 80153	146	X	Steel Plate Beam Guardrail	Nov. 1, 2005	Aug. 1, 2007
80143	147	X	Subcontractor Mobilization Payments	April 2, 2005	lam 4 0007
80075	2226	**************************************	Surface Testing of Pavements	April 1, 2002	Jan. 1, 2007
* .80087	and the same of the same of	X	Temporary Erosion Control	Nov. 1, 2002	Aug. 1, 2007
80176	150	Х	Thermoplastic Pavement Markings	Jan. 1, 2007 April 1, 2006	Jan. 1, 2007
80161	152	Х	Traffic Signal Grounding	Oct. 15, 1975	Jan. 1, 2007
20338 80154	102	<u> </u>	Training Special Provisions Turf Reinforcement Mat	Nov. 1, 2005	Jan. 1, 2007
80185			Type ZZ Retroreflective Sheeting, Nonreflective Sheeting, and	April 1, 2007	Jan. 1, 2007
00100			Translucent Overlay Film for Highway Signs	April 1, 2007	
80162			Uninterruptable Power Supply (UPS)	April 1, 2006	Jan. 1, 2007
80149			Variable Spaced Tining	Aug. 1, 2005	Jan. 1, 2007
80163	155	X	Water Blaster with Vacuum Recovery	April 1, 2006	Jan. 1, 2007
80071	100	 ^	Working Days	Jan. 1, 2002	Juli. 1, 2007
00071			1		

The following special provisions have been deleted from use:

<u>80139 Portland Cement</u> This special provision is now covered in a BMPR Policy Memorandum "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

<u>80120 Precast, Prestressed Concrete Members</u> This special provision is now in BMPR's "Manual for Fabrication of Precast Prestressed Concrete Products".

80145 Suspension of Slipformed Parapets This special provision is no longer required.

The following special provisions are either in the 2007 Standard Specifications or the 2007 Recurring Special Provisions:

File Name	Special Provision Title	New Location	Effective	Revised
80156	Aggregate Shipping Tickets	Articles 1003.01(f),	Jan. 1, 2006	
		1004.01(f) & 1005.01(d)		•
80128	Authority of Railroad Engineer	Article 105.02	July 1, 2004	
80065	Bituminous Base Course/Widening Superpave	Sections 355, 356, 1030 &	April 1, 2002	Aug. 1, 2005
		1102		
80050	Bituminous Concrete Surface Course	Article 406.13(b)	April 1, 2001	April 1, 2003
80066	Bridge Deck Construction	Sections 503, 1004, 1020 &1103	April 1, 2002	April 1, 2004

File Name	Special Provision Title	New Location	Effective	Revised
80118 80031	Butt Joints Calcium Chloride Accelerator for Portland Cement	Article 406.08 Recurring # 28	April 1, 2004 Jan. 1, 2001	April 1, 2005
80077	Concrete Patching Chair Supports	Article 421.04(a)	Nov. 1, 2002	Nov. 2, 2002
80051	Coarse Aggregate for Trench Backfill, Backfill and Bedding	Sections 208, 542, 550, 1003 & 1004	April 1, 2001	Nov. 1, 2003
80094	Concrete Admixtures	Article 1020.05(b) & Section 1021	Jan. 1, 2003	July 1, 2004
80112	Concrete Barrier	Section 637	Jan. 1, 2004	April 2, 2004
80102	Corrugated Metal Pipe Culverts	Articles 542.04(d), 1006.01(a)(4) & 1006.03(d)	Aug. 1, 2003	July 1, 2004
80114	Curing and Protection of Concrete Construction	Sections 503, 1020 & 1022	Jan. 1, 2004	Nov. 1, 2005
80146	Detectable Warnings	Section 424	Aug. 1, 2005	,
80144	Elastomeric Bearings	Section 1083	April 1, 2005	
31578	Epoxy Coating on Reinforcement	Sections 420, 483 & 606	April 1, 1997	Jan. 1, 2003
80041	Epoxy Pavement Marking	Article 1095.04	Jan. 1, 2001	Aug. 1, 2003
80055	Erosion and Sediment Control Deficiency Deduction	Article 105.03(a)	Aug. 1, 2001	Nov. 1, 2001
80103	Expansion Joints	Article 420.05(d)	Aug. 1, 2003	
80101	Flagger Vests	Article 701.13	April 1, 2003	Jan. 1, 2006
80079	Freeze-Thaw Rating	Article 1004.02(f)	Nov. 1, 2002	
80072	Furnished Excavation	Section 204	Aug. 1, 2002	Nov. 1, 2004
80054	Hand Vibrator	Article 1103.17(a)	Nov. 1, 2003	
80147	Illuminated Sign	Sections 801, 891 & 1084	Aug. 1, 2005	
80104	Inlet Filters	Section 280 &	Aug. 1, 2003	
		Article 1081.15(h)		
80080	Insertion Lining of Pipe Culverts	Section 543 & Article 1040.04	Nov. 1, 2002	Aug. 1, 2003
80150	Light Emitting Diode (LED) Pedestrian Signal Head	Sections 801, 881, & 1078	Nov. 1, 2005	April 1, 2006
80067	Light Emitting Diode (LED) Signal Head	Sections 801, 880 & 1078	April 1, 2002	Nov. 1, 2005
80081	Lime Gradation Requirements	Article 1012.03	Nov. 1, 2002	•
80133	Lime Stabilized Soil Mixture	Section 310	Nov. 1, 2004	April 1, 2006
80158	Manholes	Article 1042.10	April 1, 2006	•
80137	Minimum Lane Width with Lane Closure	Article 701.06	Jan. 1, 2005	
80138	Mulching Seeded Areas	Section 251 &	Jan. 1, 2005	
	- 4.1-	Article 1081.06(a)(4)	0 1 1 0000	
80116	Partial Payments	Article 109.07	Sept. 1, 2003	
80013	Pavement and Shoulder Resurfacing	Recurring # 14	Feb. 1, 2000	July 1, 2004
53600	Pavement Thickness Determination for Payment	Articles 407.03, 407.10, 420.03, 420.15 & 421.04	April 1, 1999	Jan. 1, 2004
80155	Payrolls and Payroll Records	Recurring #1 & #5	Aug. 10, 2005	
80130	Personal Protective Equipment	Article 701.12	July 1, 2004	
80073	Polymer Modified Emulsified Asphalt	Article 1032.06	Nov. 1, 2002	
80124	Portable Changeable Message Signs	Articles 701.15(j), 701.20(h) & 1106.02(j)	Nov. 1, 1993	April 2, 2004
80083	Portland Cement Concrete	Articles 1103.01 & 1103.02	Nov. 1, 2002	
80036	Portland Cement Concrete Patching	Sections 442, 701, 1013 & 1020	Jan. 1, 2001	Jan. 1, 2004
419	Precast Concrete Products	Sections 540, 1020 & 1042	July 1, 1999	Nov. 1, 2004
80084	Preformed Recycled Rubber Joint Filler	Articles 503.02, 637.02 & 1051.10	Nov. 1, 2002	
80121	PVC Pipeliner	Recurring # 18	April 1, 2004	April 1, 2005
80159	Railroad Flaggers	Article 107.12	April 1, 2006	•

File Name	Special Provision Title	New Location	<u>Effective</u>	Revised
80122	Railroad, Full-Actuated Controller and Cabinet	Articles 857.04,	April 1, 2004	
		1073.01(c)(2) &		
		1074.03(a)(5)e.		
80105	Raised Reflective Pavement Markers (Bridge)	Articles 781.03(a), 781.05	Aug. 1, 2003	
		& 1096.01(b)		
80011	RAP for Use in Bituminous Concrete Mixtures	Sections 1030 & 1031	Jan. 1, 2000	April 1, 2002
80032	Remove and Re-Erect Steel Plate Beam Guardrail and Traffic Barrier Terminals	Section 633	Jan. 1, 2001	Jan. 1, 2005
80085	Sealing Abandoned Water Wells	Section 672	Nov. 1, 2002	
80096	Shoulder Rumble Strips	Section 642	Jan. 1, 2003	
80140	Shoulder Stabilization at Guardrail	Article 630.06	Jan. 1, 2005	
80135	Soil Modification	Section 302	Nov. 1, 2004	April 1, 2006
80070	Stabilized Subbase and Bituminous Shoulders	Sections 312, 482, 1030 &	April 1, 2002	Aug. 1, 2005
000.0	Superpave	1102	·	·g,
80086	Subgrade Preparation	Section 301	Nov. 1, 2002	
80010	Superpave Bituminous Concrete Mixtures	Sections 406, 407 & 1030	Jan. 1, 2000	April 1, 2004
80039	Superpave Bituminous Concrete Mixtures (Low	Sections 406, 407 & 1030	Jan. 1, 2001	April 1, 2004
	ESAL)			•
80092	Temporary Concrete Barrier	Section 704	Oct. 1, 2002	Nov. 1, 2003
80008	Temporary Module Glare Screen System	Recurring # 22	Jan. 1, 2000	
80106	Temporary Portable Bridge Traffic Signals	Recurring # 23	Aug. 1, 2003	
80098	Traffic Barrier Terminals	Section 631	Jan. 1, 2003	
57291	Traffic Control Deficiency Deduction	Article 105.03(b)	April 1, 1992	Jan. 1, 2005
80107	Transient Voltage Surge Suppression	Article 1074.03(a)(4)	Aug. 1, 2003	
80123	Truck Bed Release Agent	Article 1030.08	April 1, 2004	
80048	Weight Control Deficiency Deduction	Article 109.01	April 1, 2001	Aug. 1, 2002
80090	Work Zone Public Information Signs		Sept. 1, 2002	Jan. 1, 2005
80125	Work Zone Speed Limit Signs	Article 701.14(b)	April 2, 2004	Jan. 1, 2006
80126	Work Zone Traffic Control	Articles 701.19 & 701.20	April 2, 2004	Nov. 1, 2005
80097	Work Zone Traffic Control Devices	Section 701 &	Jan. 1, 2003	Nov. 1, 2004
		Article 1106.02		

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

- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2007 (hereinafter 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, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of FAU Route 1545 (Bailey Road), Section No. 00-00115-00-BR, Project No. BHM-8003 (343) in DuPage County and in case of conflict with any or part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

Bailey Road over West Branch DuPage River Section: BHM-8003 (343) County: DuPage

Location of Project

This replacement of structure begins along Bailey Road at Station 1+31.77, approximately 130 feet east of the centerline of Washington Street and extends over the West Branch DuPage River in an easterly direction through the City of Naperville and ends at Station 5+50.00. The improvement gross length is 419 feet (0.08 miles).

Description of Project

The work includes the complete superstructure replacement and substructure reconstruction with widening of Structure Number 022-3028. Additional work to be performed under this contract includes: concrete bridge approach slabs, storm sewer replacement, HMA pavement surfacing, curb and gutter removal and replacement, sidewalk removal and replacement, pavement markings, installation of a duct bank and vault package and all incidental and collateral work necessary to complete the project as shown on the plans and as described herein.

Bailey Road over West Branch DuPage River Section: 00 – 00115 – 00 - BR DuPage County

Maintenance of Roadways

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

Beginning on the date that the Contractor begins work on this project, he 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 this work will be provided by the Contractor as required by the Engineer.

If items of work have not been provided for 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: July 1, 1994

Utility companies involved in this project have provided the estimated dates:

Name of Utility	<u>Type</u>	<u>Location</u>	Estimated Dates for Start and completion of Relocation or Adjustments
City of Naperville, DPU- Water	Water	N side of roadway/under river	No work anticipated.
City of Naperville, DPU- Wastewater	Sanitary Sewer	Parallel to west river bank.	No work anticipated.
City of Naperville,	Storm Sewer	SW Quadrant at bridge – outfall. NE Quadrant at bridge – outfall. NW Quadrant at bridge – 2 outfalls	No work anticipated.
DPU- Stormwater			No work anticipated.
Otomwator			Changes included in this contract.
AT&T	Telephone	SW Quadrant of bridge – box and underground line.	AT&T has been notified and relocation anticipated prior to construction.
NICOR	Gas	N side of roadway/under river	No work anticipated.
City of Naperville, DPU - Electric	Electric	N and S ROW underground, pole line S side,	Pole line relocated by Sept. 2007. Underground done as part of this contract.
COMCAST	GT Cable	Aerial line along south curb line	Comcast has been notified and relocation of aerial line anticipated prior to
		Subsurface line across Bailey Road just west of lighthouse Drive	construction. Contractor shall coordinate with Comcast to facilitate temporary relocation and maintenance of this facility, if necessary.

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.

COMPLETION DATE PLUS WORKING DAYS

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

Revise Article 108.05 (b) of the Standard Specifications as follows:

"When a completion date plus working days is specified, the Contractor shall complete all contract items and safely open all roadways to traffic by 11:59 PM on <u>August 16, 2008</u> except as specified herein.

The Contractor will be allowed to complete all clean-up work and punch list items within 10 working days after the completion date for opening the roadway to traffic. Under extenuating circumstances the Engineer may direct that certain items of work, not affecting the safe opening of the roadway to traffic, may be completed within the working days allowed for clean up work and punch list items. Temporary lane closures for this work may be allowed at the discretion of the Engineer.

Article 108.09 or the Special Provision for "Failure to Complete the Work on Time", if included in this contract, shall apply to both the completion date and the number of working days.

FAILURE TO COMPLETE THE WORK ON TIME

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

Modified by TY Lin International: June 2007.

Should the Contractor fail to complete the work on or before the completion date as specified in the Special Provision for "Completion Date Plus Working Days", or the time limit for Stage II Bridge Closure as specified in the Special Provision for "Incentive Payment Plan", or within such extended time as may have been allowed by the City of Naperville, the Contractor shall be liable to the City of Naperville in the amount as specified in the Special Provision for "Incentive Payment Plan", not as a penalty but as liquidated damages, for each calendar day or a portion thereof of overrun in the contract time or such extended time as may have been allowed.

In fixing the damages as set out herein, the desire is to establish a certain mode of calculation for the work since the City of Naperville's actual loss, in the event of delay, cannot be predetermined, would be difficult of ascertainment, and a matter of argument and unprofitable litigation. This said mode is an equitable rule for measurement of the City of Naperville actual loss and fairly takes into account the loss of use of the roadway if the project is delayed in completion. The City of Naperville shall not be required to provide any actual loss in order to recover these liquidated damages provided herein, as said damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day shown on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later.

INCENTIVE PAYMENT PLAN

Effective: October 1, 1995 Revised: January 1, 2007

Modified by T Y Lin International: June 2007.

The Contractor shall be entitled to an incentive payment for completing all necessary contract items to safely reopen Bailey Road to vehicular traffic at the completion of Stage II Construction as shown on the Plans.

The incentive payment shall be paid at the rate of \$2,500 per calendar day for completion of work, as specified above, each day prior to the time limit, as indicated in TABLE A. The maximum payment under this incentive plan will be limited to 10 calendar days.

TABLE A

Item	Time Limit	Incentive Payment	Disincentive Deduction
Stage II Bridge Closure (1)	120 calendar days	\$2,500 perday	\$2,500 per day
Project Completion Date	August 16, 2008 *		\$1,500 per day **

⁽¹⁾ Defined as closure of Bailey Road to vehicular traffic during Stage II Construction.

The disincentive deduction for each item in the above table shall be charged until work is completed.

A calendar day is every day shown on the calendar and starts at 12:00 midnight and ends the following 12:00 midnight, twenty-four hours later.

Should the Contractor be delayed in the commencement, prosecution or completion of the work for any reason, there shall be no extension of the incentive payment completion date even though there may be granted an extension of time for completion of the work. No incentive will be paid if the Contractor fails to complete the work before the specified completion date. Failure by the Contractor to complete all work as specified above before August 16, 2008, shall release and discharge the City of Naperville and all of its officers, agents and employees from any and all claims and demands for payment of any incentive amount or damages arising from the refusal to pay an incentive amount.

^{*} The completion date specified in the contract.

^{**}If "Stage II Bridge Closure" disincentive deduction coincides with the deduction for Project Completion Date, this amount is in addition to the "Stage II Bridge Closure" amount.

RECLAIMED ASPHALT PAVEMENT FOR NON-POROUS EMBANKMENT AND BACKFILL

Effective: April 1, 2001 Revised: January 1, 2007

Add the following sentence to Article 1004.05 (a) of the Standard Specifications:

"Reclaimed Asphalt Pavement (RAP) may be used as aggregate in Non-porous Granular Embankment and Backfill. The Rap material shall be reclaimed asphalt pavement material resulting from the cold milling or crushing of an existing hot-mix bituminous concrete pavement structure, including shoulders. RAP containing contaminants such as earth, brick, concrete, sheet asphalt, sand, or other materials identified by the Department will be unacceptable until the contaminants are thoroughly removed.

Add the following sentence to Article 1004.05 (c)(2) of the Standard Specifications:

"One hundred percent of the RAP when used shall pass the 3 inch (75 mm) sieve. The RAP shall be well graded from coarse to fine. RAP that is gap-graded or single-sized will not be accepted."

AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS

Effective: April 1, 2001 Revised: January 2, 2007

Revise Article 402.10 of the Standard Specifications to read:

"402.10 For Temporary Access. The contractor shall construct and maintain aggregate surface course for temporary access to private entrances, commercial entrances and roads according to Article 402.07 and as directed by the Engineer.

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

- (a) Private Entrance. The minimum width shall be 12 ft (3.6 m). The minimum compacted thickness shall be 6 in. (150 mm). The maximum grade shall be eight percent, except as required to match the existing grade.
- (b) Commercial Entrance. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The maximum grade shall be six percent, except as required to match the existing grade.
- (c) Road. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The grade and elevation shall be the same as the removed pavement, except as required to meet the grade of any new pavement constructed.

Maintaining the temporary access shall include relocating and/or regrading the aggregate surface 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."

Add the following to Article 402.12 of the Standard Specifications:

"Aggregate surface course for temporary access will be measured for payment as each for every private entrance, commercial entrance or road constructed for the purpose of temporary access. If a residential drive, commercial entrance, or road is to be constructed under multiple stages, the aggregate needed to construct the second or subsequent stages will not be measured for payment but shall be included in the cost per each of the type specified."

Revise the second paragraph of Article 402.13 of the Standard Specifications to read:

"Aggregate surface course for temporary access will be paid for at the contract unit price per each for TEMPORARY ACCESS (PRIVATE ENTRANCE), TEMPORARY ACCESS (COMMERCIAL ENTRANCE) or TEMPORARY ACCESS (ROAD).

Partial payment of the each amount bid for temporary access, of the type specified, will be paid according to the following schedule:

- (a) Upon construction of the temporary access, sixty percent of the contract unit price per each, of the type constructed, will be paid.
- (b) Subject to the approval of the Engineer for the adequate maintenance and removal of the temporary access, the remaining forty percent of the pay item will be paid upon the permanent removal of the temporary access."

BACKFILLING STORM SEWER UNDER ROADWAY

Effective: September 30, 1985

Revised: July 2, 1994

For storm sewer constructed under the roadway, backfilling methods two and three authorized under the provisions of Article 550.07 will not be allowed.

WORK ZONE TRAFFIC CONTROL (LUMP SUM PAYMENT)

Effective: February 1, 1996 Revised: January 1, 2007

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.

DuPage County

Method of Measurement:

All traffic control (except traffic control pavement marking) indicated on the traffic control plan details and specified in the Special Provisions will be measured for payment on a lump sum basis. Traffic control pavement markings will be measured per foot (meter).

Basis of Payment:

All traffic control and protection will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

SHORT TERM PAVEMENT MARKING, TEMPORARY PAVEMENT MARKING and PAVEMENT MARKING TAPE TYPE III will be paid for separately.

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 contact the District One Bureau of Traffic at least 72 hours in advance of beginning work.

STANDARDS

701501, 701606, 701701, 701801, 702001, 704001

DETAILS

Maintenance of Traffic Plans, Stages of Construction IDOT District 1 Detail TC-13 Temporary Concrete Barrier for Stage Construction

SPECIAL PROVISIONS

Maintenance of Roadways
Traffic Control Plan
Work Zone Traffic Control (Lump Sum Payment)
Traffic Control and Protection for Temporary Detour
Traffic Control and Protection (Special), Location 1

TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR

Effective: September 1, 1995 Revised: January 1, 2007

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.

Basis of Payment. This work will be paid for at the contract unit price each for TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR.

EPOXY COATING ON REINFORCEMENT (DISTRICT ONE)

Effective: January 1, 2007

For work outside the limits of bridge approach pavement, all references in the Highway Standards and Standard Specifications for reinforcement, dowel bars, tie bars and chair supports for pavement, shoulders, curb, gutter, combination curb and gutter and median shall be epoxy coated, unless noted on the plan.

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:

	<u>ltem</u>	<u>Article/Section</u>
a.)	Sign Base (Notes 1 & 2)	1090
b.)	Sign Face (Note 3)	1091
c.)	Sign Legends	1092
d.)	Sign Supports	1093
e.)	Overlay Panels (Note 4)	1090.02
•		

- Note 1. The Contractor may use 5/8 inch (16 mm) instead of 3/4 inch (19 mm) thick plywood.
- Note 2. Type A sheeting can be used on the plywood base.
- Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.
- Note 4. The overlay panels shall be 0.08 inch (2 mm) thick.

GENERAL CONSTRUCTION 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.

Segmental Concrete Block Wall

Effective: January 7, 1999 Revised: August 28, 2001 Project specific revisions

<u>Description</u>. The work consists of furnishing the design computations, shop plans, materials, equipment and labor to construct a Segmental Concrete Block Retaining Wall.

<u>General.</u> The wall shall consist of a leveling pad, precast concrete blocks, select granular backfill and, if required by the design, soil reinforcement. The materials, fabrication, and construction of the wall components are subject to the approval by the Engineer. The Engineer reserves the right to obtain random samples for material testing. The wall shall be designed and constructed according to the lines and grades and dimensions shown on the contract plans and approved shop plans.

<u>Submittals</u>. The wall supplier shall submit design computations and shop plans to the Engineer. The shop plans shall be sealed by a Licensed Professional Engineer and shall include all details, dimensions, quantities and cross sections necessary to construct the wall and shall include but not be limited to the following items:

- (a) Plan, elevation and cross section sheets for each wall showing the following;
- 1. A plan view of the wall indicating the offsets for the construction centerline to the first course of blocks at all changes in horizontal alignment. These shall be calculated using the offsets to the front face of the block shown on the contract plans and the supplier's proposed wall batter. The plan view shall indicate bottom (and top course of block when battered), the excavation and select granular backfill limits as well as any soil reinforcing required by the design. The centerline of any drainage structure or pipe behind or passing through/under the wall shall also be shown.
- 2. An elevation view of the wall, indicating the elevation and all steps in the top course of blocks along the length of the wall. The top of these blocks shall be at or above the theoretical top of block line shown on the contract plans. This view shall also show the steps and proposed tops of leveling pad elevations as well as the finished grade line at the wall face specified on the contract plans. The leveling pad elevations shall be located at or below the theoretical top of leveling line shown on the contract plans. The location, size and length of any soil reinforcing connected to the blocks shall be indicated.
- 3. Typical cross sections showing the limits of the select granular backfill, soil reinforcement if used in the design. The right of way limits shall be indicated as well as the proposed excavation, cut slopes and the elevations relationship between existing ground conditions and proposed grades.
 - 4. All general notes required for constructing the wall.
- (b) All details for the leveling pads, including the steps, shall be shown. The theoretical top of the leveling pad shall either be below the anticipated frost depth or 450mm (1.5 Ft.) below finished grade line at the wall face unless otherwise shown on the plans. The minimum leveling pad thickness shall be 152mm (6 in.).
- (c) Cap blocks shall be used to cover the top of the standard block units. The top course of blocks and cap blocks shall be stepped to satisfy the top of block line shown on the contract plans.
- (d) All details of the block and /or soil reinforcement placement around all appurtenances located behind, on top of, or passing through the wall shall be clearly indicated. Any modifications to the design of these appurtenances to accommodate a particular design arrangement shall also be submitted.
- (e) All details of the blocks, including color and texture shall be shown. The exterior faces shall preferably be straight, textured with a "split rock face" pattern, and dark gray in color unless otherwise stated on the plans.
- (f) All block types (standard, cap, corner, and radius turning blocks) shall be detailed showing all dimensions.
- (g) All blocks shall have alignment/connection devices such as shear keys, leading/trailing lips or pins. The details for the connection devices between adjacent blocks and the block to soil

reinforcement shall be shown. The block set back or race batter shall be limited to 20 degrees from vertical, unless otherwise shown by the plans.

The initial submittal shall include 3 sets of prints to the detailed shop plans and 1 set of calculations. One set of plans will be returned to the Contractor with any corrections indicated. After approval, the Contractor shall furnish the Engineer with 8 sets of corrected plan prints for distribution. No work or ordering of materials for the structure shall be done by the Contractor until the submittal shall been approved in writing by the Engineer.

Materials. The materials shall meet the following requirements:

(a) Pre-cast Concrete Block: The block proposed for use shall be produced according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products", and shall satisfy the following:

Conform to the requirements of ASTM C 1372 except as follows:

- 1. Fly ash shall be according to Articles 1010.01 and 1010.03.
- 2. Ground granulated blast-furnace slag shall be according to Section 1016.
- 3. Aggregate shall be according to Articles 1003.02 and 1004.02 with the exception of gradation. Chert gravel may be used based on past in–service satisfactory performance, in the environment in which the product is to be used.
- 4. Water shall be according to Section 1002.
- 5. Testing for freeze-thaw durability will not be required. However, unsatisfactory field performance as determined by the Department will be cause to prohibit the use of the block on Department projects.
- (b). Select Granular Backfill. The material behind the blocks and above a 1:1 slope extending upward from either the back of the bottom block or soil reinforcement (whichever is greater) shall consist of either a coarse aggregate satisfying Article 1004.06(a), or a fine aggregate according to the first sentence of Article 1003.04(a). The aggregate shall also meet the following:

Coarse Aggregate Gradation
Fine Aggregate Gradation
Coarse Aggregate Quality
Fine Aggregate Quality
Internal Friction Angle
pH

CA 6 thru CA 16 (Article 1004.01(c))
FA 1, FA 2 or FA 20 (Article 1003.01 (c))
Minimum Class C (Article 1004.01(b))
Minimum Class C (Article 1003.01(b))
34 degrees min. (AASHTO T 236)
4.5 to 9 (AASHTO T 289)

When a fine aggregate is selected, the rear of all block joints shall be covered by a non-woven needle punch geotextile filter material according to Article 1080.05 of the Standard Specifications and shall have a minimum permeability according to ASTM D 4491 of 0.008 cm/sec. All fabric overlaps shall be 150mm (6 inches) and non-sewn. As an alternative to the geotextile, a coarse aggregate shall be placed against the back face of the blocks to create a

minimum 300 mm (12 inches) wide continuous gradation filter to prevent the select fill material from passing through the block joints.

- (c) The leveling pad shall be either be Class SI concrete according to Article 1020.04 or compacted coarse aggregate according to Articles 1004.04, (a) and (b). The compacted coarse aggregate gradation shall be CA 6 or CA 10.
- (d) Soil Reinforcement. If soil reinforcement is required by the approved design, the Contractor shall submit a manufacturer's certification for the soil reinforcement properties which equals or exceeds those required in the design computations. The soil reinforcement shall be manufactured from high-density polyethylene (HDPE) uniaxial or polypropylene biaxial resins, or high tenacity polyester fibers with PVC coating, stored between =29 and 60 degrees C (-20 and 140 degrees F). The following standards shall be used in determining and demonstrating the soil reinforcement capacities:

ASTM D-638	Test Method for Tensile Properties of Plastic
ASTM D-1248	Specification for Polyethylene Plastics Molding and Extrusion Materials
ASTM D-4218	Test Method for Carbon Black Content in Polyethylene Compounds
ASTM D-5262	Test Method for Evaluation the Unconfined Tension Creep Behavior of
	Geosynthetics
GG1-Standard	Test Method for Geogrid Rib Tensile Strength
GG2-Standard	Test Method for Geogrid Junction Strength
GG3-Standard	Practice for Determination for the Long Term Design Strength of Geogrid
GG4-Standard	Practice for Evaluation Geogrid Pullout Behavior

<u>Design Criteria</u>. The design shall be according to AASHTO Specifications and commentaries for Earth Retaining Walls or FHWA Publication no. HI-95-038, SA-96-071 and SA-96-072. The wall Supplier shall be responsible of all internal stability aspects of the wall design.

Internal stability design shall insure that adequate factors of safety against overturning and sliding are present at each level of block. If required by design, soil reinforcement shall be utilized and the loading at the block/soil reinforcement connection as well as the failure surface must be indicated. The calculations to determine the allowable load of the solid reinforcement and the factor of safety against pullout shall also be included. The analyses of settlement, bearing capacity, and overall slope stability are the responsibility of the Department.

External loads such as those applied through structure foundations, from traffic or railroads, slope surcharge, etc., shall be accounted for in the internal stability design. The presence of all appurtenances behind, in front of, mounted upon or passing through the wall volume such as drainage structures, utilities, structure foundation elements, or other items shall be accounted for in the internal stability design of the wall.

<u>Construction Requirements</u>. The Contractor shall obtain technical assistance from the supplier during wall erection to demonstrate proper construction procedures and shall include all costs related to this technical assistance in the unit price bid for this item.

The foundation material for the leveling pad and select granular backfill volume shall be graded to the design elevation and compacted according to Article 205.06 except the minimum required compaction shall be 95 percent of the standard laboratory density. Any foundation

soils found to be unsuitable shall be removed and replaced as directed by the Engineer and shall be paid for according to Article 109.04.

The select granular backfill lift placement shall closely follow the erection of each coarse of blocks. All aggregate shall be swept from the top of the block prior to placing the next block lift. If soil reinforcement is used, the selected granular backfill material shall be leveled and compacted before placing an attaching the soil reinforcement to the blocks. The soil reinforcement shall be pulled taut staked in place and select fill placed from the rear face of the blocks outward. The lift thickness shall be the lesser of 255mm (10 inches) loose measurement or the proposed block height.

The select granular backfill shall be compacted according to Article 205.06, except the minimum required compaction shall be 95 percent of the standard laboratory density. Compaction shall be achieved using a minimum of 3 passes of a lightweight mechanical tamper, roller or vibratory system. The top 300 mm (12 Inches) of backfill shall be cohesive, impervious material capable of supporting vegetation, unless other details are specified on the plans.

The blocks shall be maintained in position as successive lifts are compacted along the rear face of the block. Vertical, horizontal, and rotational alignment tolerances shall net exceed 12 mm (1/2 inch) when measured along a 3 m (10 ft.) straight edge.

<u>Method of Measurement:</u> Segmental Concrete Block Wall will be measured by the square meter (square foot) of wall face from the top of block line to the theoretical top of the leveling pad for the length of the wall in a vertical plane, as shown on the contract plans.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per square meter (square foot) for SEGMENTAL CONCRETE BLOCK WALL.

TRAFFIC CONTROL AND PROTECTION (SPECIAL), LOCATION 1

Specific traffic control plan details and Special Provisions have been prepared for the closure of the adjacent DuPage River Trail. 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.

The Trail may only be closed as per the full closure detail as shown in the plans. No partial or limited access closures will be allowed for safety reasons.

The Trail may only be closed with two (2) weeks (14 days) prior notice to the City of Naperville and to DuPage County Forest Preserve District. The Bike Path closure signs, indicating the dates of closure must be posted a minimum of one (1) week (7 days) prior to the closure.

The Bike Path may only be closed for a maximum of fifteen (15) calendar days per each closure occasion. A maximum of two (2) closure occasions are allowed as a part of the project, anticipated to be for the following:

- 1). Installation of electrical items and
- 2). Restoration of pavement, driveway and sidewalk areas

The City of Naperville will allow the Bike Path to be re-opened between closure periods with the following requirements:

- a. All open holes must be filled level with the surrounding area.
- b. No open trenches or exposed cable are allowed.
- c. All drainage must be restored. No standing water allowed on the Path.
- d. The Bike Path surface must be restored to the line and grade of the existing path with a minimum of 2-inches of compacted Limestone Screenings.
- e. All Path closure signs must be covered or removed.
- f. Additional temporary signing in each direction must be installed: 36-inch x 36-inch W8-
- 7 (Loose Gravel) at the beginning of any aggregate surfaced areas.
- g. All temporary fencing or permanent fencing and/or barricades must be in place.
- h. The Path must be inspected and approved by the Engineer and a representative of the City of Naperville prior to re-opening.

The cost of the installation of Limestone Screenings will be paid for separately per ton, as TEMPORARY AGGREGATE. The City of Naperville will, from time to time during the interim reopened period, require that the Contractor place additional temporary aggregate surfaces to maintain safe temporary surfaces on the Path. Such work will be paid for separately per ton, as TEMPORARY AGGREGATE.

Method of Measurement:

All traffic control (except traffic control pavement marking) indicated on the traffic control plan details and specified in the Special Provisions will be measured for payment per each closure period.

Basis of Payment:

All traffic control and protection for the Bike Path will be paid for at the contract price, per each for TRAFFIC CONTROL AND PROTECTION (SPECIAL), LOCATION 1.

Combination Concrete Curb and Gutter, Type B6.12 (Special) Combination Concrete Curb and Gutter, Type M6.12 (Special)

This work shall be performed in accordance with Section 606 of the Standard Specifications except as herein modified.

The depth of the Combination Concrete Curb and Gutter shall be equal to the bottom of the existing pavement section, when adjacent to flexible pavement. The shape of the Combination Concrete Curb and Gutter shall match the City of Naperville standard details as shown on sheet 78 of the Plans.

Bridge Approach Pavement (Special)

<u>Description</u>: This work shall consist of the construction of Portland cement concrete bridge approach pavement to the length and width as indicated on the plans along with sidewalks, concrete median and parapets supported by approach pavement at locations as shown on the plans, in accordance with applicable portions of Section 420 of the Standard Specification, and as directed by the Engineer.

Also included will be the furnishing and placement of Type A aggregate base course as shown on the plans, in accordance with applicable portions of Section 351 of the Standard Specifications, and as directed by the Engineer.

<u>Method of Measurement</u>: BRIDGE APPROACH PAVEMENT (SPECIAL) will be measured for payment in place and the area computed in square yards. The length will be measured along the centerline of structure. The width will be as shown on the plans.

<u>Basis of Payment</u>: This work will be paid at the contract unit price per square yard for BRIDGE APPROACH PAVEMENT (SPECIAL).

The unit price for BRIDGE APPROACH PAVEMENT (SPECIAL) shall include tie bars, preformed joint seal, polyethylene bond breaker, granular sub-base, reinforcement bars, the concrete pad (including reinforcement and excavation), and all other items necessary to complete this item of work.

Removal of Existing Superstructures

<u>Description</u>: This work shall consist of the complete removal and satisfactory disposal of the existing superstructure including prestressed deck beams, concrete parapets, bituminous concrete overlay, waterproofing membrane, preformed joint seal and aluminum railing as indicated on the drawings, and as specified. The work to be performed shall be in accordance with Section 501 of the Standard Specifications.

The removal of existing deck beams shall be performed in a manner which does not damage the deck beams which are to remain for stage construction. To facilitate the removal of the existing beam(s) and to prevent damage to the beams to remain, a saw cut shall be made along the center of the shear key between the beam(s) to be removed and the beam(s) to remain. The saw cut shall be made the full depth of the shear key. The Contractor shall accurately locate the position of the shear keys prior to saw cutting operations. This may require the removal of the existing wearing surface over the shear keys. Any damage done to the beams, which are to remain during stage construction, shall be repaired by the Contractor, to the satisfaction of the Engineer, at no additional cost. The Contractor shall install the bearing plates to the existing tie rods as shown on the plans.

All removal including removal of grout in existing shear keys and removal of concrete in existing deck beams for the purpose of accessing tie rods shall be done in a manner that does not cause excessive damage to the beams to be removed. Excessive damage and/or the deteriorated condition of the beams may cause the beams to be unstable during removal. The

Contractor is responsible for providing any support necessary for the beams to be removed. Personnel and equipment shall not be allowed on or under beams to be removed anytime after the removal operations begin.

Basis of Payment This work will be paid for at the contract lump sum price for REMOVAL OF EXISTING SUPERSTRUCTURES, which price shall include payment for removal and satisfactory disposal of precast concrete deck beams, concrete parapets, bituminous concrete overlay, waterproofing membrane, preformed joint seal and aluminum railings. Also included is the furnishing and installation of existing tie rod bearing plates between adjacent beams as indicated on the plans.

Temporary Bridge Complete No. 1

<u>Description</u>: This work shall consist of the design, fabrication, installation, maintenance and removal of a temporary pedestrian bridge over the West Branch of the DuPage River at the location shown on the plans and as directed by the Engineer, including approach pavement, handrails, decking and all other appurtenances deemed necessary to safely guide the public over the West Branch of the DuPage River. All work shall be in accordance with Section 513 of the Standard Specification and as herein modified.

<u>General Requirements</u>: The superstructure shall conform to the clear span requirements of the existing substructure units as shown on the plans. The width of the structure must fit within the widened portion of the substructure. The AASHTO "Guide Specifications for Design of Pedestrian Bridges" shall govern the design. The design loads shall be as specified by the AASHTO Guide Specification and this Special Provision. No vehicular loads will be allowed on the structure.

The bridge units shall provide for a minimum of (4-foot) clear width between the rail elements for pedestrians and other users of the structure.

Structural steel shall conform to the requirements of Section 1006 of the Standard Specifications unless otherwise approved by the Engineer. The structural steel field connections shall be bolted with high strength bolts. High strength bolts, including suitable nuts and plain hardened washers, shall conform to the requirements of Article 1006.08 of the Standard Specifications.

The railing shall consist of a smooth rub rail, a toe plate and other misc. elements. The rail shall be a minimum of 54 inches in height measured from the top of deck surface. Within a band bordered by the deck surface and 27 inches above it all elements of the rail assembly shall be spaced such that a 6-inch sphere will not pass through any opening. Above 27 inches all elements shall be spaced such that an 8-inch sphere will not pass through any opening. If rail elements employ both horizontal and vertical elements, the spacing requirements shall apply to one but not to both. The minimum design loading for the rail shall be 50 pounds per linear foot transversely and vertically, acting simultaneously on each rail.

Prior to beginning construction or fabrication the Contractor shall submit design calculations and shop drawings for review and approval. Temporary bridge plans shall be sealed by an Illinois Licensed Structural Engineer.

The approach to the temporary bridge shall be graded as necessary to provide a transition to the existing sidewalk. The material shall be crushed limestone or other appropriate base as directed by the Engineer suitable for use on trails.

Method of Measurement: This work shall be measured for payment as each.

Basis of Payment: This work shall be paid for at the contract price, each, for TEMPORARY BRIDGE COMPLETE NO. 1, which price shall be payment in full for designing, furnishing, shipping, installing, maintaining and removing a temporary pedestrian bridge. Also included is the furnishing, installation and removal of any approach grading to the bridge.

Portland Cement Concrete Sidewalk 6 Inch, Special

<u>Description</u>: This work shall consist of constructing Portland cement concrete sidewalk and sidewalk accessibility ramps on a proposed subgrade. The work shall be in accordance with Section 424 of the Standard Specifications except as herein modified.

The sidewalks shall contain welded wire fabric placed at mid thickness. Welded wire fabric shall be in accordance with Article 1006.10 (b) (1) of the Standard Specifications with minimum size of 6"x6" – w2.9xw2.9.

Method of Measurement: This work shall be in accordance with Article 424.12 of the Standard Specifications.

<u>Basis of Payment</u>: This work shall be paid at the contract unit price per square foot for PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH, SPECIAL.

Temporary Ditch Checks

This Special Provision revises Section 280 of the Standard Specifications for Road and Bridge Construction to eliminate the use of Aggregate Ditch Checks and Hay or Straw Bales for Temporary Ditch Checks.

Delete Paragraphs 2 and 3 of Article 280.04(a) Temporary Ditch Checks.

Add to Article 280.04 (a) Temporary Ditch Checks: Temporary Ditch Checks shall be at least 3.66 meters (12 feet) or longer in length.

Silt Curtain

Description:

This work shall consist of furnishing, installing and removing a temporary silt curtain device to trap silt in existing streams during construction at the locations shown on the plans and as directed by the Engineer.

Materials:

Floatation boom: 8-inch diameter solid expanded polystyrene log type of approved equal with approximately 20lbs/ft. buoyancy. Polystyrene beads or chips shall not be used for floatation.

Fabric: The silt fabric shall have a minimum grab tensile strength of 180 lbs. Equivalent Opening Size (U.S. Standard Sieve) shall be 60to 170. Seams shall be heat sealed or sewn.

Main Load Line: 5/16-inch cable.

Ballast: 5/16-inch chain.

Installation:

The floatation boom shall be installed in such a manner as to prevent drift shoreward or downstream. The floatation log shall be securely attached to the fabric in both the horizontal and vertical direction.

The 5/16-inch cable shall be attached above the floatation members and extend the entire length of each section of silt screen. A 5/16 chain shall be sealed on the lower hem for ballast. Connectors shall join the main load line and ballast chain to carry all tensile pressure. The Fabric shall be joined for its entire height.

Anchorage's shall be installed on both shore and stream side to maximum stability. Shore anchors shall consist of a post with deadmen or approved equal. Stream anchors shall be of sufficient size, type and strength to stabilize the barrier beyond the construction area.

Anchors shall be buoyed to prevent the boom from being pulled under water. Danforth type anchors shall be used in sandy bottom and heavy kedge type or mushroom anchors on mud bottoms.

The contractor shall be responsible for maintenance of the boom throughout construction operations. Upon completion of the work, the contractor shall remove the boom in a manner that will prevent siltation of the river.

Method of Measurement: The silt curtain will be measured in square yards of material measured at the point of installation, the dimension being from the width of stream at the maximum high water level listed on the plans to the channel bottom elevation at the point of installation.

<u>Basis of Payment</u>: This work shall be paid for at the contract price, per square yard for SILT CURTAIN.

Sediment Control, Drainage Structure Inlet Filter Cleaning

<u>Description</u>: This work shall consist of cleaning sediment out of a drainage structure inlet filter when directed by the Engineer. This cleaning work is to be periodically performed as directed by the Engineer, for the duration of the use of each drainage structure inlet filter assembly. The Engineer will be the sole judge of the need for cleaning, based on the rate that debris and silt is collected at each inlet filter location.

Cleaning of the inlet filter shall consist of inspecting, cleaning (includes removal and proper disposal of debris and silt that has accumulated in the filter fabric bag), by vactoring, removing and dumping or any other method approved by the Engineer.

<u>Method of Measurement:</u> Cleaning of the drainage structure inlet filter shall be measured for payment each time that the cleaning work is performed at each of the drainage structure inlet filter locations.

<u>Basis of Payment</u>: The work will be paid for at the contract unit price per each for SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER CLEANING, which price shall include all costs for labor, materials, equipment, and incidentals necessary to perform the work.

Perimeter Erosion Barrier, Modified

Work under this item must be performed in accordance with the applicable portions of Section 201 and 280 of the Standard Specifications and in accordance with the Standard details and special detail found on the plans, except as herein modified.

Description: This work must consist of constructing a temporary perimeter erosion barrier as shown on the plans or as directed by the Engineer through the use of silt filter fences in combination with temporary fencing. The perimeter erosion control barrier is intended to be used for both the protection of designated 'scenic easements', trees, shrubs and plant material from intrusions of work equipment, to delineate and protect the public from hazardous areas and to serve as the silt fence.

The Perimeter Erosion Barrier, Modified item must consist of furnishing and erecting a temporary fence and a silt fence at the locations shown on the plans, in accordance with the detail on the plans and as directed by the Engineer.

Temporary fence must be chain link fencing. The temporary fence must be a minimum of 1 m (4 ft) high with stakes or posts placed a maximum of 3 m (10 ft) apart. The silt filter fence shall be in accordance with Section 280 of the Standard Specifications. This item also includes the removal and disposal of the temporary fencing and posts when no longer required.

The protection of 'scenic easements' is important on this project. When the Engineer is notified or determines a deficiency exists, he/she will be the sole judge as to the perimeter erosion barrier deficiency. Perimeter Erosion Barrier, Modified deficiencies may include but are not limited to:

Perimeter Erosion Barrier, Modified not in place at the start of construction. Perimeter Erosion Barrier, Modified fencing damaged or down.

Unauthorized removal of Perimeter Erosion Barrier, Modified fencing.

The Contractor must dispatch sufficient resources within 2 hours of notification to make needed corrections of deficiencies. If the Contractor fails to restore the required Perimeter Erosion Barrier within the time limits specified above, the Engineer will impose a monetary deduction for each incident. This time period will begin with the time of notification to the Contractor and end with the Resident Engineer's acceptance of the corrections. For this project, the monetary deduction will be \$500 per occurrence. In addition, if the Contractor fails to respond, the Engineer may correct the deficiencies and the cost thereof will be deducted from monies due or which may become due the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

If any material and/or equipment is found to be over or outside of the Perimeter Erosion Barrier, Modified fencing or if the Contractor's operations are found to be encroaching upon the scenic corridor easements, the Engineer will immediately impose a monetary deduction for each occurrence found. An additional \$500 deduction will be imposed for each hour that said encroachment is not addressed.

In the event that landscape or landscape elements outside of the Perimeter Erosion Barrier, Modified are damaged by the Contractor's operation or personnel, the Contractor must be responsible for repair or remediation of the damage as determined by the Engineer, the appropriate Municipality, County or Township and/or the property owner. In the event that the damage to any trees are beyond repair and requires removal or trees was mistakenly removed by the Contractor, the trees must be replaced on a unit size for unit size basis, with the minimum acceptable size replacement trees of 5 units or greater. The quality of the replacement tree must be equivalent to the standards of the Illinois Department of Transportation. The cost of this work will be the responsibility of the Contractor.

Method of Measurement: PERIMETER EROSION BARRIER, MODIFIED will be measured for payment in meters in place.

Basis of Payment: The work must be paid for at the contract unit price per meter of PERIMETER EROSION BARRIER, MODIFIED. The contract unit prices must include all labor, material, and equipment required to complete the work as shown on the plans, standard details, and as specified.

Resetting Survey Monuments

This work shall be performed in accordance with Section 667 and Section 668 of the Standard Specifications except as herein modified.

The existing DuPage County Permanent Survey Monument located on the northwest wingwall of the existing bridge shall be reset into the new wingwall. A new bronze disk with appropriate information shall be installed on the new wingwall.

All appropriate records for resetting the monument shall be legally filed by an Illinois Registered Land Surveyor in accordance with the requirements of DuPage County.

Basis of Payment: This work shall be paid for at the contract unit price, each, for RESETTING SURVEY MONUMENTS.

Concrete Riprap Removal

This work shall be performed in accordance with Section 440 except as herein modified.

The work includes removal of existing stone or broken concrete rip rap of unknown size from around an existing 36 " diameter corrugated metal storm sewer and metal end section, that has been covered in a Portland Cement Concrete slurry-like material of unknown mixture.

Method of Measurement: This work shall be measured in square yards of riprap surface area to be removed.

Basis of Payment: This work shall be paid for at the contract unit price, per square yard, for Concrete Riprap Removal.

Temporary Fencing

<u>Description</u>: This work shall consist of placing a temporary chain link fence as shown on the plans and as directed by the Engineer. This work shall be performed in accordance with Section 664 of the Standard Specifications except as herein modified.

The chain link fence shall have a minimum height of 54". The fence shall have horizontal braces at a minimum along the base, mid-height and along the top of the fencing. Horizontal braces shall be of the type as specified in Highway Standard 664001. The fence posts shall be spaced such that they can withstand a minimum design loading of 50 pounds per linear foot transversely and vertically, acting simultaneously on each post. Where the temporary fencing is placed between the limits of the existing approach bents or as directed by the Engineer, fence posts shall be rigidly attached to or embedded into the existing pavement to restrict access to the construction site. Base plates with four threaded inserts shall be used for securing posts to existing PPC deck beams. Inserts for 1 inch diameter H.S. bolts with flat hardened washers shall be provided. Inserts shall be anchored 2 ½" into the existing beams.

<u>Method of Measurement:</u> Temporary Fencing will be measured for payment in feet along the top of the fence.

<u>Basis of Payment</u>: The work will be paid for at the contract unit price per foot for TEMPORARY FENCING, which price shall include all costs for labor, materials, equipment, and incidentals necessary to perform the work.

Temporary Aggregate

This work shall be performed in accordance with Article 402 of the Standard Specifications except as herein modified.

Temporary Aggregate is to be used to restore the walking/riding surface of the DuPage River Trail within the construction areas.

The material shall be Limestone Screenings.

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The Temporary Aggregate shall be placed and compacted to a minimum of 2-inches in depth at all trench crossing locations and at any areas where the hot mix asphalt surface of the path has been removed for construction purposes. The cost of any additional excavation of material necessary to achieve the 2-inch depth of limestone screenings shall be considered as included in the cost of TEMPORARY AGGREGATE.

From time to time, the City of Naperville will require the limestone screenings to be regraded, reshaped, maintained and/or new material added to maintain the smooth riding characteristics of the path. The Contractor will be required to perform the repair and/or maintenance on the path within 24 hours of the request of the City. Any new material will be paid for at the contract unit price for TEMPORARY AGGREGATE. The cost of the maintenance or regrading shall be considered as included in the cost of TEMPORARY AGGREGATE.

Basis of Payment: This work shall be paid for at the contract unit price, per ton, for TEMPORARY AGGREGATE.

Temporary Sidewalk Ramp

This work shall be constructed in accordance with Section 408 of the Standard Specifications except as herein modified.

This work consists of the construction of temporary Hot Mix Asphalt accessible sidewalk ramps to accommodate pedestrians in the construction zone. The work includes any necessary excavation, butt joint removal, furnishing and installing hot mix asphalt material, furnishing PVC or other approved pipe, removal and proper disposal.

The ramps shall be a minimum of 2-inches depth of hot mix material except at end locations where the ramp tapers to meet existing pavement. Depth at the limit of the taper may be 1-inch.

All ramps shall meet the lines and dimensions for IDOT Standard 424001, latest version, Curb Ramps for Sidewalks, or as shown in the details on the plans.

The ends of the ramps must be flush with existing pavement or sidewalks. Any removals of sod, earth, aggregate, hot mix asphalt or other pavement material necessary to obtain flush connections shall be included in the cost of the TEMPORARY SIDEWALK RAMP.

The hot mix asphalt for this item is not expected to be placed for use by vehicular traffic. Mixture composition IL-9.5, Mix 'C' will be allowed. The contractor may substitute IDOT Class SI Portland Cement Concrete for the Hot-Mix Asphalt at no additional compensation.

Drainage of the existing curb line must be maintained after installation of the Temporary Sidewalk Ramps. A minimum 4-inch diameter pipe of PVC or approved equal pipe shall be placed in the flow line of the curb for the length of the ramp and the temporary ramp material placed adjacent. The use of any previously used pipe material must be approved and inspected by the Engineer in advance of placement. Damaged or broken pipe material will not be allowed.

Basis of Payment: This work shall be paid for at the contract unit price, per each, for TEMPORARY SIDEWALK RAMP, which price shall include all excavation, pavement removal,

materials, installation and removal necessary to complete the temporary ramps per standards and as shown on the plans.

Stabilized Construction Entrance

Description:

This work consists of constructing a stabilized pad of coarse aggregate underlain with geotechnical fabric at the locations where construction traffic will be entering or leaving the work zone. Also included is the removal and satisfactory disposal of the stabilized construction entrance when no longer required. This work shall be performed in accordance with the applicable portions of Sections 202, 210, 1004 and 1080 of the Standard Specifications, the details in the plans and as directed by the Engineer.

Materials:

Aggregate shall consist of coarse aggregate gradations CA-1, CA-2, CA-3, or CA-4 meeting the requirements of Article 1004.04. Aggregate thickness shall be a minimum of 6 inches.

Geotechnical fabric shall meet the requirements of Article 1080.02.

General:

Excess or unsuitable excavated materials shall be disposed of in accordance with Article 202.03.

The coarse aggregate surface coarse shall be compacted to the satisfaction of the Engineer.

Restoration shall be paid for separately as FURNISHED EXCAVATION, TOPSOIL FURNISH AND PLACE, 4", SODDING, SALT TOLERANT, SEEDING CLASS 4A, NITROGEN FERTILIZER NUTRIENT, PHOSPHORUS FERTILIZER NUTRIENT, POTASSIUM FERTILIZER NUTRIENT and EROSION CONTROL BLANKET.

Method of Measurement:

The stabilized construction entrance will be measured in place and the area computed in square yards.

Basis of Payment:

This work will be paid for at the contract unit price per square yard for STABILIZED CONSTRUCTION ENTRANCE, which price shall be payment in full for all excavation, except excavation in rock; removal and disposal of excavated materials; geotechnical fabric; furnishing, placing, compacting, and disposing of coarse aggregate; and for all labor, tools and equipment necessary to construct the work as specified.

CITY OF NAPERVILLE ELECTRICAL CONSTRUCTION

GENERAL CONDITIONS

Description of the Work and General Items

This project includes the installation of approximately 9420 lineal feet of 6" diameter Schedule 40 PVC conduit in concrete and FA-2 encased duct bank, 1720 lineal feet of 5" diameter schedule 40 PVC conduit in concrete and FA-2 encased duct bank, 1080 lineal feet of 3" diameter schedule 40 PVC conduit in concrete and FA-2 encased duct bank, 8 Handholes, 2 Risers, 4 Switch Gear Vaults with covers, install all under-bridge conduit support system with 12 -6 inch ridged galvanized, 10 foot long steel conduit, transition/ transposition area's with 6 inch steel conduit, (207 FEET) all removals, all temporary work, all potholing work, all road removal and restoration work, all field restoration, all traffic control, following all IEPA Regulations when working over a body of Water, all field documentation, measurements and field sketches, all "As Built's", all field modifications to existing electric facilities, all miscellaneous items from Washington street on the West to Coach drive on the East and all the work on the Bailey Bridge crossing the DuPage River for a complete job.. See City of Naperville Electric Drawings in the Plans and Details/Standard Drawings attached.

This project also includes the removal and installation of existing roadwork. This project also includes working around, above, under, and to the side of an existing energized distribution underground and overhead 12kv lines. The underground and overhead line conforms to requirements of grade-B construction in heavy loading districts with appurtenances.

The Contractor is to consider the streets, alleys, roads, drives and easement with in the City of Naperville's right-of-way owned by the City. However, there a numerous County and State Highways within in the city limits and additional permits may be required. This information is to be obtained from the County and State offices.

Provide restoration and all temporary facilities to maintain existing utility services. The transferring or relocation of existing facilities or support is considered incidental to the work and is included for a complete job.

The Contractor shall provide trained and qualified/certified 12 kv line electricians in confined space entry, tag in – tag out procedures and qualified to work on, near or around 12kV overhead or underground energized facilities. All employees shall be O.S.H.A trained in live line work

Materials In General

Materials supplied by the City of Naperville and installed by the Contractor are listed on page 71. However, the under bridge conduit support system, switch gear vault lids and 6 inch steel ridged steel conduit with couplings and steel to schedule 40 pvc adapters are to be furnished by the Contractor.

Materials supplied, installed and stored by the Contractor are those necessary to install the under-bridge conduit support system, and include, but are not limited to: 6" Rigid Galvanized steel conduit with steel-to-plastic threaded couplings (both ends); conduit hanger materials, welding supplies, fall protection materials, vault cover, and all other miscellaneous items required for a complete installation plus the plastic ties to secure the 3 inch conduit to the duct

sections, plus 2inch diameter galvanized pipe for the sidewalk guy installation, .if required. The Contractor shall supply all materials not supplied by the City of Naperville but are required for a complete job. All material costs are included in pricing for each item bid.

The City of Naperville furnished materials will be loaded, transported and unloaded by the Contractor from the City warehouse at 1392 Aurora Av. to the job site. The Contractor will properly store and protect all materials on site. Any miscellaneous materials not supplied by the City, but necessary to complete the work as shown on the Plans, as directed by the Engineer or as specified herein will be supplied by the Contractor and are considered included in the cost of the various items of work. Materials issued by the City but not used in the course of the job shall be promptly returned to the City.

The Contractor will not be allowed inside the City storage area without being accompanied by warehouse personnel.

Material pick-up will only be allowed between Mondays – Friday from 7:00 A.M. to 3:00 P.M. No Saturday or Sunday pick-up will be allowed.

The warehouse is closed daily from 12:00 P.M. to 1:00 P.M. Between 7:00 A.M. and 8:00 A.M. Public utility crews will be loaded first. After they are loaded material will be released on a first come first serve basis.

Material will not be loaded on trucks, trailers or pick-ups without proper restraints to secure materials for public safety on the roadways. Warehouse will not supply straps or other restraints.

No additional cost to the Contractor will be allowed for failure to follow the limitations prescribed above which result in materials not being released from the warehouse. The Contractor shall verify, identify and tabulate and document all materials received. The Contractor shall carefully determine the appropriateness, quantity, and type of all materials supplied by the City of Naperville. No additional compensation will be allowed for installation of inappropriate materials, size, or type or make of materials supplied by the City of Naperville. The excuse that's what they gave me is not acceptable. The Contractor shall give the storeroom person a list of materials needed at the time of pick up. The Contractor is to provide the WF# at this time.

For additional types of material other than that which is issued for this project, contact SENIOR ENGINEER (Rich Schlueter) at (630) 420-6190 or Paul Michalowski (630) 305-5227. For general warehouse questions contact Terry Skala at (630) 420-4136.

Handling of Materials

Proper equipment, tools, materials, and facilities satisfactory to the Engineer shall be provided and used by the Contractor for the prosecution of the various items of work. Pipe, fittings, wood poles, vaults, manholes and other accessories shall at all times be handled with care to avoid damage. In loading and unloading the Contractor will follow the recommendations of the manufacturer. Under no circumstances will they be dropped or rolled off the truck.

The Contractor will carefully examine, inventory all materials supplied by the City or a supplier, count and document all materials received immediately before accepting from the City or supplier. If any pipes or materials are found to be damaged, defective or are short in count, the Contractor will immediately notify the City and Engineer. All materials provided and later lost, misplaced or stolen or just plan not found shall be replaced by the Contractor at the Contractor's expense and no delay costs will be allowed.

All pipes, fittings, manholes and other accessories shall be carefully lowered into the trench piece-by-piece in such manner as to prevent damage.

Clean the interior of conduit, hand holes, vaults, manholes and fittings before installing and keep clean until the completed items of work are ready for acceptance. Remove dirt, excavated materials or other foreign matter from all material prior to installing and maintain until accepted.

Energized Lines: General Requirements

The Contractor is advised energized overhead lines are in the work area. They will remain energized for the duration of the project. Contractor will work around lines and any costs incurred by doing so are included in the cost of the various items of work. The Contractor personnel shall be trained to work around underground live cable or overhead live conductor per O.S.H.A regulations. The Contractor shall have on the job site two (2) 12kv line electricians qualified by training and experience to perform work in energized equipment and cables for the duration of the project. Upon request the two electricians shall be able to provide all references and certification of the ability to perform 12 Kv electrician work. This includes all confined space training, CPR training and Tag in/ tag out procedures to the satisfaction of the City of Naperville. The Contractor to request an outage 96 hours in advance of requiring the work to be started.

CITY OF NAPERVILLE ELECTRICAL CONSTRUCTION

SPECIAL CONDITIONS

1. Definitions

Throughout the Standard Conditions the following definitions shall apply:

NDPW - Naperville Department of Public Works

NDPU - Naperville Department of Public Utilities

2. Easements and Permits

The City will make available all necessary rights-of-way in advance of construction, any exceptions will be so noted in the preconstruction meeting for the Contractor's information.

The Contractor shall be furnished with copies of all applicable easement agreements as executed by the City. It shall be the Contractor's responsibility to keep all materials and machinery within easements that have been provided as shown on the plans and liability rests with him for damage to any areas outside and inside of said easements. The Contractor is advised all work activities shall be restricted to the easements and the Contractor shall arrange any ingress or egress across the property. Written permission from the property owner is required and all claims shall be sole responsibility of the Contractor. The Contractor shall obtain a waiver from each property owner involved.

3. Materials

Materials indicated in these Specifications as supplied by the DPU—E shall be picked up by the Contractor at storage facilities as designated by the DPU—E and this picking up, sorting, hauling, loading, unloading, tracking, security, proper size equipment, labor, tools, storage off site, preparing damage claims, and replacing all materials found unacceptable to use after the contractor accepts material list and keeping an inventory of all materials picked up until completion of the project shall be considered incidental to the contract. Manhole and side walk splice box deliveries shall be coordinated by the Contractor by contacting the City's supplier directly and arranging for the timely delivery and placement on site of the manholes.

It is the Contractors responsibility to determine from the work specification and material list - that materials furnished by the City of Naperville are sufficient to complete the job. The Contractor shall maintain a tally of all materials picked up by WF number and continuously update the tally to show what has been installed and what is needed to complete each WF#.

As the project progresses, the Tally shall be updated.

The Contractor Shall notify the City of Naperville in writing, before the commencement of work, of any shortages of one or more types or quantities of materials required for a

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complete job. The Contractor shall be responsible to provide any shortages of materials in type or quantity furnished by the City of Naperville during the progress of the work. No claims for extra compensation will be considered for cost incurred because of lack of adequate materials. (See drawing 58199 Sheets 1 through 20)

The Contractor shall cause to have prepared in written form, a list of all materials showing quantities, size, and types of materials the Contractor needs to complete the entire Project and present it to the Project Engineer two weeks after the Project is awarded and prior to the start of Work. Failure by the contractor to inventory the materials prior to start of work and inform the City in writing shall indicate to the City of Naperville all materials are correct in size, quantity and type to do all the work required for a complete installed project

The Contractor shall follow the following material pick up procedures;

- A. Material from the warehouse shall be issued from the "Material Issue Desk" located inside the west service door marked "Water Meter Pickup".
- B. Material shall be issued to the correct WF #. This WF # shall be provide at the preconstruction meeting. The person picking up material shall have the WF # so we can provide the correct materials to do the work. The person picking up the material shall sign the material ticket indicating materials picked up, condition, quantity and date. The ticket shall be given to the company engineer on the work site.
- C. Material shall be released from the stockyard to the Contractor contacting the warehouse personnel at the "Material Issue Desk".
- D. The Contractor shall be allowed inside the stockyard only when accompanied by warehouse personnel.
- E. Material shall be loaded on trucks, trailers or pickups only with proper restraints to secure material for public safety on the roadways. Warehouse will not supply straps, blocking or other restraints.
- F. Material pick-up Monday through Friday, 7:00 a.m. to 3:00 p.m. Contractors will not be loaded on Saturdays, Sundays or Holidays.
- G The warehouse is closed daily from 12:00 p.m. to 1:00 p.m.
- H. Between 7:00 a.m. and 8:00 a.m. City of Naperville crews will be loaded first. After they are loaded, it will be first come, first served.
- J. For any discrepancies in type and quantity of materials to be received, please call the Project Engineer. The Project Engineer will be identified at the preconstruction meeting.
- K. Please call Terry Skala at (630) 420-4136 for questions regarding all warehouse procedures.

4. Disposal of Surplus Material

The Contractor is prohibited from burning <u>any</u> material on or adjacent to the improvement. All excess, excavated, garbage or waste material shall be hauled away from the site of the improvement by the Contractor and deposited at legal dump site locations provided by the Contractor.

No extra compensation will be allowed the Contractor for any expense incurred by complying with the requirements of this Special Condition.

5. Water for Construction Purposes

City water for construction purposes will be available to the Contractor at his cost according to the rates in effect at the time of usage. The Contractor will use water only from a location approved by the NDPU Water and Wastewater. If approved, the procedure for securing the City meter is:

The Contractor shall contact:

NDPU - Water and Wastewater North Operating Center (N.O.C.) (630) 305-5263 1200 W. Ogden Avenue Naperville, Illinois 60563-2918

The Contractor shall submit to the NDPU a check payable to the City of Naperville for \$150.00 as a deposit and sign out for three-quarter inch (3/4) water meter or \$500.00 for a fire hydrant meter that will fit a 3" hose. Upon completion of the project, or whenever the water meter and water are no longer required, the Contractor shall return the meter in good condition to the same location. The balance of this deposit will be processed for repayment after the deduction of the money charged towards the number of gallons of water used.

6. Hauling Material Furnished by City

The Contractor shall furnish the necessary equipment and labor to load, unload, sort, document, tally, and haul to the contractor storage facility, and to the job site, all material furnished by the City. The Contractor shall bear the cost of such loading, unloading, inventory, counting, documentation, equipment, labor, materials, delivery, sorting, tabulating, identifying, and hauling.

7. Material – Responsibility

The Contractor shall check all electrical work related material (other than HMA and Concrete) received whether direct from the manufacturer or from the City at the time of its receipt. The Contractor or his representative shall sign a record of all such materials received by the Contractor, and the record so made shall determine the amount of material received by the Contractor from the City. The Contractor shall be solely responsible for all materials after the same have been received and signed for by the Contractor or his representative. Any such materials lost, stolen, or damaged shall be charged to the Contractor as hereinafter provided. Upon completion of the Contract or a segment thereof, when applicable, a representative of the Contractor and the City shall make a complete inventory of the Work and of all materials, which the Contractor has returned to the City.

Any shortage between the materials delivered to the Contractor and the inventory, plus any materials returned by the Contractor in a damaged condition shall be charged to the Contractor at cost plus twenty percent and shall be deducted from the amount due the Contractor.

The Contractor shall inspect the conduit and associated materials upon receipt and report all shortages or damage immediately

8. Inspection of Drawings and Specifications

The Contractor shall report to the City any error or errors he may find upon inspection of the Drawings and Specifications.

9. Repair on Damaged City of Naperville Facilities

The Contractor is advised the City of Naperville may not be able to immediately make emergency repairs on any City of Naperville facility damaged by the Contractor . Therefore, the Contractor may be required to make all repairs under the direction of the City of Naperville. The repair work is considered an emergency and a sufficient work force and equipment provided by the Contractor shall be dispatched immediately to correct the problem.

The Contractor shall replace, repair, adjust or modify all equipment and/or facilities damaged by the Contractor's construction activities at the Contractors cost and including all City of Naperville costs associated with the work.

The Contractor shall be directed to provide the necessary work force, labor, tools, transportation, materials, equipment and supervision to make the necessary repairs. The Contractor shall have available at all times a licensed and knowledgeable work force to perform water, sanitary sewer, electrical facility or storm water under ground construction work to the City of Naperville standards.

The Contractor shall document all activities by taking pictures of the damaged area, keeping track of the personnel, equipment, time and materials and make restoration and landscaping of the area.

The Contractor shall Contact Pat Eyre 630-420-4122 of the City of Naperville's Water and Waste Water of the Naperville Department of Public Utilities to report all damage. At this time it will be determined what work group will repair the damage.

10. Facilities Provided on the Site by the Contractor.

The Contractor shall supply a sufficient number of ground resistance testers for testing grounds at each vault location. (AEMC testers). Testing equipment can be purchased by the Contractor from Mitchell Instrument Company Model # C43730, phone# 1-800-270-2690, and can be used for both the fall of potential method and clamp on method.

11. Right of Way

The Contractor shall notify the Engineer at least one week in advance of any work on, over, or across any other utility. The Contractor shall also notify said utility to arrange for

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such protection as may be required by said utility. Any delay resulting from lack of adequate notification shall be at the Contractor's expense.

In all cases the Contractor shall contact the owners and/or tenants before working, and before the Contractor uses ingress or egress on their property. The Contractor shall make written notification 72 hours in advance of work and obtain the owner's name, phone number and permission. This information is required to allow the Property owner time to adjust his/her schedule and provide input.

12. Insurance

City of Naperville and the Naperville Park District shall be named as an additional independent insured on all insurance policies.

13. WARNING TO CONTRACTOR'S EMPLOYEES

The Contractor knows that the City is engaged in the business of transmitting electric power and shall warn his employees against the hazards incident to such operation. Neither the Contractor nor any of his employees or subcontractors' employees shall enter any part of the City's premises, other than the places where the work is being done, or touch, move, manipulate or tamper with any wires, gas pipes, fixtures, machines, appliances or equipment of the City without express permission from the Engineer. The Contractor shall so instruct all of his employees and subcontractors on the job.

14. Safety Precautions

Some of the construction along the route shall be done in close proximity to existing energized conductors as well as lower voltage distribution circuits now in operation, due caution shall be taken to prevent accidental contact with or damage to any part of these lines, or any other overhead conductors or underground utilities encountered along the right-of-way. It shall be the Contractor's responsibility to locate all facilities by hand digging and /or machine aided digging as deemed necessary. The Contractor shall consider all electric lines overhead or underground Energized at all times.

15. Contractor's Employees..

The Contractor shall employee only qualified people in the work of installing 12kv Electrical Distribution Systems with energized or deenergized facilities. The Contractor shall furnish journeymen line electricians, experienced and certified for the duration of the project. They shall be trained in all OSHA requirements for live line work, CPR, tagout tag in procedures, confined Space entry, overhead or underground electrical work below 72 Kv, clearance requirements to energized facilities of all types, and be certified in the last 24 months. They shall be qualified per OSHA regulations. Each worker shall be identified as certified prior to working on the project. The employer/ Contractor shall produce the certificate upon request.

CONDUIT IN TRENCH, 3" DIA. PVC CONDUIT IN TRENCH, 5 " DIA. PVC CONDUIT IN TRENCH, 6" DIA. PVC

Description: This work shall be performed in accordance with Section 810 of the IDOT Standard Specifications except as herein modified. This work shall consist of installing 3-inch, 5-inch, or 6-inch Schedule 40 PVC conduit assembled into duct bank systems of the type and size specified herein and as noted in the Plans.

The work includes but is not limited to assembly of duct banks, clearing and grubbing, transplanting bushes and shrubs, tree protection, removing the street base, removing all excavated materials and debris off site, excavation of the trench, shoring and bracing materials as required per OSHA, line and grade, loading and transporting the PVC conduit from the City of Naperville storage locations, installing conduit bedding, installing the PVC conduit, base spacers, intermediate spacers, connection to the existing or new manholes, splice boxes, and/or vaults, connect to PVC conduit or steel conduit (adapter connectors for steel to plastic supplied and installed with 4 foot long concrete encasement around duct bank by the Contractor), de-watering of the trench, testing and protection. The trench shall be excavated to the neat lines, width and depth as shown as sections on the plans or as directed by the Engineer. The conduit duct system shall be assembled in to 1-WAY (1High by 1 Wide), 2-WAY (1High by 2 Wide) 3-WAY (1High by 3 Wide) 4-WAY (1High by 4 Wide), 4-WAY (2High by 2 Wide) 6-WAY (2High by 3 Wide) 6-WAY (1High by 6 Wide), 12-Way (2High by 6 Wide) using 3-inch,5-inch or 6-inch Schedule 40 pvc or combinations of 3-inch,5-inch,or 6-inch PVC conduit material.

Materials supplied by the City will include 3-inch, 5-inch and 6-inch PVC Schedule 40 pipe, conduit, bends, steel bends, fittings, couplings, intermediate spacers, warning tape, pull rope or detectable tape, summer cement (slow curing), marker balls and plugs. Materials shall be loaded, transported and deposited by the contractor from City storage areas to the site.

The 3-inch, 5-inch and 6-inch diameter heavy wall Schedule 40 PVC conduits (20 foot lengths) shall be installed in a prepared trench on a 2" level bed of fine aggregate meeting the gradation requirements of FA-2 or CA-6 to the lines and grades as shown on the Plans or as directed by the Engineer. The conduit route shall be laid out and adjusted to go over or under obstructions, conduit shall be measured, cut, aligned, straightened, adjusted, leveled, pieced together, conduit ends prepared for assembly, guided, secured, connected, assembled per the Plans, and installed on base and intermediate spacers at 5-foot spacing, so that a 2-inch separation is maintained between the conduits and 3 inches on the sides of the duct package. Additionally, conduits shall be placed so the joints are staggered where no couplings are in line with adjacent couplings. The 3-inch conduit is to be tied with plastic ties to the spacers.

During installation, conduit joints shall be cleaned with Stoddard solvent, methyl ethyl ketone, or acetone, liberally coated with solvent cement and promptly engaged with the previously installed conduit. The joint shall be turned 90 degrees to dispel air and evenly distribute the solvent cement over the contact surfaces being joined. Final assembly of the joint should not exceed 60 seconds. The Contractor shall open no more than 100-foot headway to allow for smooth grade changes of the conduit system to miss obstructions.

Upon the completion of the conduit assembly, the duct bank neat line shall be encased the full width of the trench from the invert of the bottom conduit to four (4) inches above the crown of the

top conduit with FA-2, CA6, or concrete as specified by cross sections on the plans or as directed by the Engineer. The excavation shall then be backfilled with compacted, spoil excavation clean with no rocks, controlled low-strength materials (CLSM) or trench backfill (CA-6) as shown in the Plans, stated herein, or as directed by the Engineer. Backfilling will be paid for as EARTH EXCAVATION, (SPECIAL), CONTROLLED LOW-STRENGTH MATERIAL, FA-2 ENCASEMENT or TRENCH BACKFILL, CA-6.

During the backfilling of the duct bank system, a yellow warning tape shall be installed 1.0' above the crown of the top conduit. The warning tape shall be installed with the words "CAUTION, DANGER ELECTRIC" facing up. In areas where the proposed PVC duct bank is to be placed in the street, the backfilling operations shall extend from the top of the encasement to 12 inches below existing pavement grade. In areas where the duct bank is not to be placed in the street, the backfilling operations shall extend from the top of the encasement to the sub-grade elevation to allow for 6-inches of black dirt and sod or 4-inch sidewalk with 6-inches of CA6 for final restoration of the trench area.

Contractor shall note that for ducts that are to be concrete encased, they should first be encased and cured a sufficient amount of time prior to the backfilling with aggregate or other backfill material.

EXCAVATIONS MAY NOT BE LEFT UNATTENDED. ALL EXCAVATIONS SHALL BE EITHER BACKFILLED AT THE END OF EACH DAYS WORK, OR COVERED WITH STEEL PLATES AND SECURED OF SUFFICIENT STRENGTH AND QUANTITY TO PROVIDE ACCESS TO ALL ROADWAYS AND/OR DRIVEWAYS AND OR PEDESTRIAN TRAFFIC.

The Contractor shall restore the Parkway, Public Right of Way. or easement area where an excavation site or sites where dug to an elevation, grade and slope equal to that at the time of commencement of the project. All disturbed turfed areas and grass areas shall receive a minimum of 6" of topsoil and salt tolerant sod with waterings. The Contractor shall include in the cost for restoration of the duct bank work an area that is (4) four feet on either side of the neat trench line and the length of the trench. Those areas shown in agriculture or parkway shall be restored to a depth that which existed prior to excavation. The topsoil may be utilized from material the Contractor has stockpiled from this project or hauled on-site at Contractor's option if deemed suitable by the City. Materials and methods for this item shall conform to the requirements of Section 211 and Article 1081.05 of the Standard Specifications. Surplus materials shall be disposed of at an approved legal site. The costs for topsoil and sod, watering and disposal of surplus and excavated materials shall be incidental to the PVC Ducts.

The Contractor shall provide tree protection and follow instructions on trees to be saved as shown on the plans.

If water is encountered, pumps of sufficient capacity to handle the flow shall be maintained at the site and shall be constantly attended operation on a 24-hour basis until their operation can be safely halted. When dewatering, the Contractor shall provide close observation and this requirement shall be maintained to detect any settlement, sagging or displacement of the embankment. Cost for dewatering is considered incidental to this item.

Prior to acceptance, each installed conduit shall be cleaned and tested by pulling a mandrel of appropriate size through the duct. Mandrel sizing shall be in accordance with Section 31-1.11 of the Standard Specifications for Water and Sewer Main Construction in Illinois. The Contractor shall

leave one pull string or #12 copper wire or mule tape in each duct. The testing and pulling of the mandrel shall be done in the presence of the Engineer. Any ducts found to be defective or blocked must be cleaned or repaired and re-tested to the satisfaction of the Engineer at the Contractor's expense prior to acceptance. Mandrel size shall be 5.25" in diameter for the 6" diameter SCH 40 PVC duct. 4.25" in diameter for the 5" diameter SCH 40 PVC duct and 2.25" in diameter for the 3" diameter SCH 40 PVC duct

The contractor shall provide dated sketches showing lengths measured with North arrows. After measuring please indicate slack required to install a cable termination or install a splice or a pull through. This information will be used to cut and pull cable, so accuracy is required. All measurements are to be reported to the next nearest foot.

All PVC conduit used on the job shall conform to the following: DPU-E Code 285-100-00070 Six (6) inch, five (5) inch and three (3) inch Schedule 40 heavy wall PVC conduit, supplied in 20' lengths with one belled end. Conduit must comply with UL standards 651 and NEMA TC2-1990 and must be shown on each length of conduit. Carlon 49017, J-M Manufacturing Co. Inc. 40600, Cantex A52GA12, National 333706020 or DPU-E evaluated equivalent.

The Contractor is advised the conduit run is being installed in a curvilinear street and shall require more attention to laying out a conduit run in a continuous curve. The curves shall require more detail in installing bends and providing additional bracing of the conduit run and is incidental to the work. All initial line and grades by the City of Naperville are supplied once. Any and all returns are at the Contractor's cost.

The Contractor is required to work above, next to, or under energized circuits. The Circuits shall not be deenergized unless the Contractor makes a request to do so. The request will be reviewed and if the system requirement for energy is such that the line cannot be deenergized the Contractor shall work with the line energized and follow all OSHA regulations. The Contractor shall request all lines out of service 4 days in advance. Every day, once in the morning and once at night, while the line is out of service, the Contractor shall contact the control room of the City of Naperville to confirm the status of the line. The same person each day is to contact the control room and City Inspector. The Contractor shall provide a 24 hour cell phone number to be called in the event of an electrical line status change.

Should the Contractor exceed the specified trench width, and he exceeds the allowable volumes of encasement per lineal foot and neat lines of the duct bank, he shall consider any additional material, labor or equipment incidental. The City reserves the right to reject requests for overexcavation.

Method of Measurement: The installed PVC Duct Bank shall be measured to the neat lines in place along its center line in a straight line point to point from outside edge of manhole to outside edge of manhole, or outside edge of the hand hole to the outside edge of the handhold or from the outside edge of the switch gear to the edge of a pole or outside edge of a switch gear to outside edge of another switchgear, or to the PVC Duct Bank stub installed in casing or open trench. Each conduit will be paid for separately, measured in feet.

Basis of Payment: This work shall be paid for at the contract unit price per foot, for CONDUIT IN TRENCH, PVC of the size indicated on the plans, installed, which price shall be considered payment in full for completing this work in place by the Open Cut Method to the neat lines and locations as specified in the drawings including; the excavation of the trench materials, layout work

of duct bank for proper fit, alignment, line and grade, potholing, tree protection, assembly of the ducts into duct banks of various configurations and number of ducts, offsite material disposal, restoration and landscaping of the trench and up to 4 feet either side of the neat trench, loading and transporting the PVC conduit from the City of Naperville storage locations, installing conduit bedding, installing the PVC conduit, installing 3", 5", 6" steel bends, connectors (material and labor to hook up to Steel- Plus concrete encasement) top, bottom and intermediate spacer, installing transpositions, FA2, CA6 or concrete encasement and for all labor, tools, bedding materials, equipment and incidental items necessary to complete this work as specified. Conduit id 6" I.D 5" ID, 3"ID of. PVC Schedule 40 in 20' lengths and 3inch, 5 inch and 6inch steel bends shall be supplied by the City of Naperville.

Road restoration, side walk restoration, curb and gutter restoration, drive way restoration, concrete pavement, Rod and Mandrel, Pulling Rope and Detectable Mule Tape, Trench Backfill, CA-6, Concrete Encasement, FA-2 Encasement, Controlled Low-Strength Material, Earth Excavation (Special), traffic control, shall all be paid separately.

EARTH EXCAVATION (SPECIAL)

Description: This work shall be performed in accordance with Sections 201 and 657 of the IDOT Standard Specifications except as herein modified. This work shall consist of backfilling with approved materials taken from the excavation in unpaved areas. All material not used are to be disposed of off-site.

The backfill materials, spoil, shall be placed on top of the conduit encasement up to the 6-inch layer of topsoil and sod. Backfill shall be used to fill over, next to, around and over the ductbank. The backfill material, spoil, shall be compacted by method 1 as specified in Article 542.04 of the Standard Specification. Care shall be taken when compacting the backfill materials so as not to damage the concrete encased duct package.

The contractor is required to separate out all rocks, boulders and cobblestone, stones larger than 1", and all organic materials. No rock, cobbles, stone, broken concrete or organic materials are allowed for backfill and shall be disposed of off-site.

The contractor shall make all necessary arrangements for disposal areas for excess excavated materials to be disposed off site and shall pay all costs incidental to securing permission for their use and shall dispose of all surplus excavated material without cost to the City. Stockpiling of excavated materials on-site will not be allowed overnight. When excavated material is suitable as backfill, it shall be loaded directly onto trucks for removal from the Work site or sites. No excess excavated material shall be stored on any public property or right-of-way. Such material shall be disposed of at a properly licensed landfill or on such other private property as the contractor may determine, subject to the consent of the City thereof, and the approval of all relevant governmental agencies. Notification of all disposal areas must be given to the Engineer prior to start of work by Contractor.

The Contractor shall be responsible to maintain the area backfilled during the course of the project and for one year after completion. If after backfilling, the trench area starts to sink, shift, a depression occurs, area becomes uneven, area becomes sponge, area ponds, or becomes unstable for any reason, and in the event the backfilled area can not be made stable, the entire

backfill area shall be removed and compacted with lifts of CA6. This work is all at the Contractors expense.

TYPICAL DUCT BANK SIZE TO BE BACKFILLED

12 Way, 6x6" DIA or 2x5" DIA or 4x3" DIA.

6 Way, 6 x6" DIA or 6x5"DIA or 6 x3"DIA (2Hx 3W)

6 Way, 6 x6" DIA or 6x5"DIA or 6 x3" DIA (1Hx 6W)

4-Way, 4 x 6" DIA or 4x 5" DIA or 4x3"DIA (1Hx4W)

4-Way, 4 x 6" DIA or 4x 5"DIA or 4x 3" DIA (2Hx2W)

3-Way, 3 x 6" DIA or 3x5"DIA or 3x 3" DIA (1Hx3W)

2-Way, 2 x 6" DIA or 2x 5" DIA or 2x 3" DIA (1Hx2W)

1-Way, 1x 6" DIA or 1x 5"DIA or 1x 3"DIA 1Hx1W)

Contractor to see drawings for additional duct sections not shown above but included in the project.

Method of Measurement: Placing of backfill shall be visually observed by the Engineer and shall be measured in place in cubic yards, as compacted, based on the length and depth neat lines as shown on the plans and field documented and verified to the maximum trench width and depth as shown in the typical conduit section detail. The depth shall be measured in place from the top of the FA-2 or concrete encasement to the bottom of the 6inch thick layer of pulverized black dirt & sod interface above the trench. Additional backfill required due to trench greater than the specified neat lines shall be furnished and placed at the Contractor's expense. Bedding materials are considered incidental to the installation.

Basis of Payment: This work shall be paid for at the contract unit price, per cubic yard, for EARTH EXCAVATION (SPECIAL).

VIDEO TAPE

Description: This work shall consist of providing all labor and provide all materials to video tape the entire electrical construction area route including audio commentary of existing conditions. The Contractor shall make a careful examination of the location, field traverse the entire route of the project, observe and note existing site conditions and nature of the proposed work, as well as the drawings and specifications, and all other Contract Documents in connection with the work and services to be performed under this Contract.

Furthermore, he shall make a thorough investigation of the potential interference's and difficulties he may encounter such as, underground utilities, trees, fences, gardens, shrubs, out buildings, landscaping, but not limited to, road conditions or boulders and debris along fence lines for the proper and complete execution of all work specified herein and/or shown or called for on the drawings.

The video shall be in color on VHS or DVD. Two (2) copies of each presentation shall be provided. All video's to be compatible with the City of Naperville playback system, legible, in color, clear and identified by date time and location and direction.

The Contractor shall video the entire Right of way and 40 feet on either side. The Contractor shall video all evergreens, trees and fences in their natural state and show length height and depth. The

video shall pick up all land features, houses, driveways, curbs and gutters, fire hydrants, sidewalks, street markings, berms, landscaping etc. for a complete representation of what is within the work area as the Contractor walks the right of way

The Contractor shall provide all pictures with dates and times and direction and verbally document the locations. The Contractor shall provide a video and audio at the beginning of the project covering the entire project and a video when the project is completed.

Method of Measurement: This work will be measured by unit. A unit consists of each time the area is requested to be video taped. The Contractor shall provide at a minimum, one video taping session of the entire area before the work is started and one video taping session after the work is completed.

Basis of Payment: This work shall be paid for at the contract unit price, per unit for VIDEO TAPE.

NEW SWITCH GEAR VAULT

Description: This work shall install prefabricated fiber-crete switchgear vault with vault lid as per the details and at the locations shown in the plans including excavation, restoration, backfilling, installing and furnishing a vault lid with grounds and testing grounds, and installing 8-3inch conduit positions, 6-6inch conduit positions, and 4-5inch conduit positions, using steel conduit into the switchgear vaults, using 11,22,30,45 or 90 degree steel bends, or PVC bends male and female couplings, straight pieces of 3", 5", or 6 inch steel rigid conduit, with pieces of schedule 40 PVC conduit, fittings, assembly, cutting, couplings, and sealant. Estimated weight is 700 to 800 pounds.

This work requires an excavation 12 foot square and 6 feet deep, removal of excavated materials off site and backfilling with CA6, hand digging around energized 7200 volt to ground primary cables, 600 volt secondary cables and 600 volt service and street light cables. This work includes excavation by hand digging and/or machine aided digging. This work includes the installation of sufficient number of 3inch, 5inch, 6inch 11, 22, 30, 45, and 90 degree bends with pieces of conduit to extend into the vaults with 4 inches of CA-6 backfill materials under the conduit and around the vault to a depth of 6 inches below grade and finish with 6 inches of black dirt and salt tolerant sod to final grade. In addition, installation of 3", 5", 6 inch, schedule 40 PVC, 3", 5", 6 inch steel straight pieces and steel bends or plastic bends to, under and into the switchgear vault, which includes hand digging three (3) trenches, 10 feet long, 4 feet wide and 6 feet deep each.

The conduits and bends entering the vault shall be positioned and held in place and are steel and installed 6 inches above the bottom of the vault and all conduit openings shall be plugged with bell fittings and pulling wire or #12 copper wires THHN installed to and thru the lid of the vault. The Contractor shall provide the following in and around the area and at the site, CA-6 backfill materials, black dirt, salt tolerant sod, grading, landscaping, stone/rock removal, tunneling, hand digging, install new fencing, removal of fencing, provide space for work area, sidewalk replacement, curb and gutter replacement, tree and brush protection and/or replacement, arborist services, and disposal of all removed materials off site. Hand digging is considered part of the work.

All new vault locations must be approved by the CITY OF NAPERVILLE before any work is started. Vaults may be adjusted to meet the concerns of the property Owners. All locations shall be identified in the field, dimensioned and recorded in the surveyor's field book records after the job is awarded to the Contractor. No claims for extra compensation will be considered for cost incurred because of delay due to a change, or the layout of the vault will not fit in the area shown on the drawings and a move is required, accessing the equipment, utility locates or obtaining approval for said change.

This work includes installing all conduits, cutting, placing and arranging conduits, couplings, bends, pumping, tunneling, leveling, cutting, shaving, drilling, saw cutting, and coping of switch gear vault to provide an entrance hole above the support flange to install steel conduit into the vault and associated work to install conduit within and into the electrical equipment at the locations shown. In addition the opening in the vault shall be secured by the Contractor by use of a vault lid purchased by the Contractor and installed over the opening and maintained by the Contractor from vandalism, use, and wear during the length of the project.

The Contractor is advised the vault measures 76" wide by 74" long. The 76" side is the door side. The door on the switch gears shall open to the east and west.

An outage to perform this work will be determined by the condition of the City of Naperville's electrical system at the time and may not be available in a specific time frame. This condition is normal and is considered incidental to the work. A 72 to 96-hour notice is required for each and every work location. Any delay in completing the work due to outage restrictions or lack of an outage is not a reason for additional compensation and will not be considered. The Contractor shall wait to obtain an outage or move to another task.

The Contractor shall provide tree protection and follow the specifications as shown on the plans for trees to be saved.

Basis of Payment: This work shall be paid for at the Contract price per each NEW SWITCHGEAR VAULT. A Vault installed shall include, furnishing and installing the lid, final cleaning out the vault, all labor, material, tools and equipment including excavation, dewatering, grounding, testing the grounds, a lid to cover the opening in vault, top soiling 6inch black dirt and salt tolerant sod around the perimeter of the vault and extending out from the vault edges 10 feet in all directions, concrete encasement of ducts, pulling and training mule tape or wire, fencing, landscaping, grading and leveling, disposal of surplus and excavated materials off site, bedding, CA6 backfill for the entire excavation, transportation and installation of materials to complete the work herein and as shown on the engineering drawings.

HANDHOLE, DEH5 HANDHOLE, DEH6 HANDHOLE, DEH8

Description: This work shall consist of installing handhole vaults per the details and at the locations shown on the plans. Also included are grounds, test grounds, and 3 inch, 5inch and /or 6-inch steel conduit into the handholes, using 11, 22,30, 45, or 90 degree steel bends, straight pieces of 3", 5", or 6 inch steel rigid conduit with pieces of schedule 40 PVC conduit, fittings, couplings and sealant.

The Contractor is advised three types of handholes are available for installation: DEH5, (Wt. 830 lbs) DEH6 (Wt. 920 lbs.) and DEH8 (Wt. 1020 lbs.). The size of the excavation for a handhole for DEH5 is 8 feet long by 6 feet wide by 6 feet deep; for DEH6 is 10 foot long by 6 feet wide by 6 feet deep, and for DEH8 is 12 feet long by 6 feet wide by 6 feet deep. See additional excavation size and FA-2 backfill requirements on drawings.

This work includes the installation of sufficient number of 11, 22, 30, 45, and 90 degree 3", 5", or 6", bends with pieces of conduit to extend into the vaults with 4 inches of CA-6 backfill materials under the conduit and around the vault to a depth of 6 inches below grade and finish with 6 inches of black dirt and sod to final grade.

In addition, installation of 3inch, 5inch and 6 inch, schedule 40 PVC, 3", 5", or 6 inch steel straight pieces and steel or plastic bends to the handhole, which includes hand digging three (3) trenches, 10 feet long, 4 feet wide and 6 feet deep each. The conduits and bends entering the vault shall be steel; installed 6 inches above the bottom of the vault and 6 inches into the vault, and all conduit openings shall be plugged and taped See Drawings and Specifications. The Contractor shall provide 3", 5", or 6" diameter holes in the vault walls by drilling at 6 locations or as required. The Contractor shall provide in and around the area and at the site, CA-6 backfill materials, black dirt, sod, grading, landscaping, stone/rock removal, tunneling, hand digging, install new fencing, removal of fencing, provide space for work area, sidewalk removal and replacement, curb and gutter removal and replacement, tree and brush protection, and/or replacement and arborist services, and dispose of all removed materials off site. Hand digging is considered part of the work.

All new vault locations must be approved by the CITY OF NAPERVILLE before any work is started. Vaults may be adjusted to meet the concerns of the property Owners. All locations shall be identified in the field, dimensioned and recorded in the surveyor's field book records after the job is awarded to the Contractor. No claims for extra compensation will be considered for cost incurred because of delay due to a change, utility locates, or the layout of the vault will not fit in the area shown on the drawings and a move is required, accessing the equipment, accessing the equipment or obtaining approval for said change. This work includes installing all conduits, final cleaning out the hand hole, cutting, placing and arranging conduits, couplings, bends, bell fittings, conduit plugs, pumping, tunneling, leveling, and associated work to install conduit within and into the electrical equipment at the locations shown.

An outage to perform this work will be determined by the condition of the City of Naperville's electrical system at the time and may not be available in a specific time frame. This condition is normal and is considered incidental to the work. A 72 to 96 -hour notice is required for each and every work location. Any delay in completing the work due to outage restrictions or lack of an

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outage is not a reason for additional compensation and will not be considered. The Contractor shall wait to obtain an outage or move to another task.

The Contractor shall provide tree protection and follow the specifications as shown on the plans for trees to be saved.

Basis of Payment: This work shall be paid for at the Contract price per each for HANDHOLE, of the type specified, installed which shall include all labor, tools, material and equipment including excavation, dewatering, topsoiling, concrete encasement of ducts, disposal of surplus materials, bedding, backfill the entire excavation with CA-6, transportation and installation of materials to complete the work herein and as shown on the engineering drawings. Restoration is included in the pricing.

FA-2 ENCASEMENT

Description: This work shall consist of furnishing and installing FA-2 ENCASEMENT of the PVC Duct Bank system of the size and type specified herein or as noted on the Plans and shall include but not be limited to providing fine aggregate meeting the IDOT gradation of FA-2 and placing and compacting the aggregate in the trench.

FA-2 ENCASEMENT shall be used to fill under, between and 4 inches over the top duct of the duct bank system to the neat lines and full width of the trench in locations specified on the engineering drawings or as directed by the Engineer. Care shall be taken to completely encase the duct bank system with fine aggregate meeting the gradation requirements of FA-2 as specified in Article 1003.04 of the Standard Specifications in lifts no greater than 8". After the aggregate has been placed the aggregate shall be tamped with a mechanical plate to eliminate voids. Care shall be taken when compacting the aggregate to not damage the PVC conduit, or separate the joints or couplings.

The Contractor shall utilize Method I (mechanical compaction) as specified in Article 542.04, Backfilling, of the Standard Specifications. No additional compensation shall be made for jetting. FA-2 may be used as backfill material when directed to do so by the Engineer.

Method of Measurement: FA-2 ENCASEMENT shall be measured for payment in place. Placing FA-2 Encasement shall be visually observed by the City and measured for payment in place to the neat lines and full width specified as shown on the typical trench details from 2" below the invert of the bottom conduit to 4" above the crown of the top conduit less the area of the conduits or as directed by the Engineer. The table below indicates the allowable volume for payment, (cubic yards per lineal foot) for the various sizes of duct bank.

TYPICAL DUCT BANK SIZE

CUBIC YARDS OF FA-2 PER LINEAL FOOT (COMPACTED)

	6 INCH	5 INCH	<u> 3 INCH</u>
12 Way, 6 x6" DIA or 2x5"DIA or 4 x3"DIA	0.20		
6 Way, 6 x6" DIA or 6x5"DIA or 6 x3"DIA (2Hx 3W)	0.13		
6 Way, 6 x6" DIA or 6x5"DIA or 6 x3" DIA (1Hx 6W)	0.16		
4-Way, 4 x 6" DIA or 4x 5" DIA or 4x3"DIA (1Hx4W)	0.11	***************************************	0.07
4-Way, 4 x 6" DIA or 4x 5"DIA or 4x 3" DIA (2Hx2W)	0.09		
3-Way, 3 x 6" DIA or 3x5"DIA or 3x 3" DIA (1Hx3W)	0.09		
2-Way, 2 x 6" DIA or 2x 5" DIA or 2x 3" DIA (1Hx2W)	0.06	0.05	0.04
1-Way, 1x 6" DIA or 1x 5"DIA or 1x 3"DIA 1Hx1W)	0.03		

Contractor to see drawings for additional duct sections not shown above but included in the project.

No additional compensation will be allowed the Contractor should the trench width be exceeded or the Contractor exceed the allowable volumes of encasement material as noted above.

Basis of Payment: This item of work shall paid for at the contract unit price, per cubic yard, for FA-2 ENCASEMENT.

CONCRETE ENCASEMENT

Description: This work shall consist of furnishing and installing the Concrete Encasement of the PVC Duct Bank System of the size and type specified herein or as noted on the plans and shall include, but is not limited to, providing concrete as specified herein and placing and vibrating the concrete in the trench.

Concrete Encasement shall be used to fill under, between and over the duct bank system to the neat lines and full width of the trench in locations specified on the plans or as directed by the Engineer. When placing the concrete, care shall be taken to completely encase the duct bank system with the concrete meeting the mix design requirements as specified herein. After being placed, the concrete shall be vibrated by mechanical equipment to eliminate voids and ensure complete encasement of the conduits. Care shall be taken when vibrating the concrete as to not damage the PVC conduit, or separate the joints or couplings. The Duct Bank shall be held in place to prevent floating of the duct system.

The concrete shall be Class SI, as specified in Article 1020.04. The concrete shall have a slump of three (4) inches ± one (1) inch with a minimum compressive strength of 2000 psi at 28 days and an air entrainment between 5% and 8% by volume. The contractor may submit a mix design utilizing pea gravel (CA-14) for the Engineers approval.

Method of Measurement: Placing of the Concrete Encasement shall be visually observed by the City and measured for payment in place to the neat lines and full width specified as shown on the typical trench details from 3" below the invert of the bottom conduit to 4" above the crown of the top conduit less the area of the conduits or as directed by the Engineer. The table below indicates the allowable volume for payment, (cubic yards per lineal foot) for the various sizes of duct bank.

TYPICAL DUCT BANK SIZE ENCASEMENT

CUBIC YARDS OF CONCRETE PER LINEAL FOOT (PLACED)

	6 INCH	5 INCH	3 INCH
12 Way, 6 x6" DIA or 2x5"DIA or 4 x3"DIA	0.20		
6 Way, 6 x6" DIA or 6x5"DIA or 6 x3"DIA (2Hx 3W)	0.13		
6 Way, 6 x6" DIA or 6x5"DIA or 6 x3" DIA (1Hx 6W)	0.16		
4-Way, 4 x 6" DIA or 4x 5" DIA or 4x3"DIA (1Hx4W)	0.11		0.07
4-Way, 4 x 6" DIA or 4x 5"DIA or 4x 3" DIA (2Hx2W)	0.09		
3-Way, 3 x 6" DIA or 3x5"DIA or 3x 3" DIA (1Hx3W)	0.09	*****	
2-Way, 2 x 6" DIA or 2x 5" DIA or 2x 3" DIA (1Hx2W)	0.06	0.05	0.04
1-Way, 1x 6" DIA or 1x 5"DIA or 1x 3"DIA 1Hx1W)	0.03		

Contractor to see drawings for additional duct sections not shown above but included in the project.

Concrete may be used as backfill material when directed to do so by the Engineer.

No additional compensation will be allowed the Contractor should trench width be exceeded or the Contractor exceed the allowable volumes of encasement material as noted above.

Contractor shall anchor the duct to prohibit the ducts from floating when backfilling with concrete encasement.

Basis of Payment: This work will be paid for at the contract unit price per cubic yard for CONCRETE ENCASMENT, which shall be full compensation for all materials, labor, equipment and appurtenances necessary for a complete item.

TRENCH BACKFILL, CA-6

Description: This work shall consist of backfilling and compacting the duct bank with a coarse aggregate material through all pavement areas at the locations shown on the plans or as directed by the Engineer.

The aggregate shall conform to the requirements of Article 1004.01 of the Standard Specifications and the following specific requirements:

- a. <u>Description</u>: The course aggregate shall be gravel, crushed gravel, crushed stone, crushed concrete, crushed slag or crushed sandstone.
- b. Quality: The coarse aggregate shall be Class-C quality or better.
- c. <u>Gradation:</u> The course aggregate gradation shall be used as follows:

For the trench backfill in pavement areas - Gradation CA-6

i. <u>Paved Areas:</u> - As soon as the condition of the concrete will permit, the entire width of the trench shall be backfilled to the neat lines and with moist coarse aggregate meeting

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the gradation specified. The aggregate shall be placed longitudinally along the duct. The Contractor shall establish that the compressive strengths of the concrete is sufficient to bear the weight of men and equipment prior to commencing the backfilling operation. Aggregate material shall be placed in 8-inch layers, loose measurement and compacted to the satisfaction of the Engineer by ramming or tamping the tools approved by the Engineer.

The backfill shall continue to be placed and compacted as specified to the top of subgrade for future or proposed surfaces and/or shall be brought to a level even with the existing pavement to act as a temporary surface until the permanent surface can be restored. Removal of any stone to provide proper subbase elevation for temporary patches and permanent pavement will be incidental to this item. The backfill for trenches and excavation made in the subgrade of the existing or proposed improvement, and for all trenches outside of the subgrade where the inner edge of the trench is within 4 feet of the edge of the existing or proposed pavement, curb, gutter, curb and gutter, or sidewalk, shall be made with trench backfill material, unless the excavated material meets the requirements of the course aggregate specified.

All backfill material up to a height of 12 inches above the conduit shall be carefully deposited in uniform layers not exceeding 8 inches thick (loose measure). The material in each layer shall be firmly compacted by ramming or tamping with tools approved by the Engineer in such a manner as not to disturb or injure the duct. The backfilling and compaction above this height shall be done by Method 1, as specified in Article 542.04 of the Standard Specifications.

At the end of the settling and drying period, the crusted top of the backfill material shall be scarified and, if necessary, sufficient backfill material added, as specified in Method 1, to complete the backfilling operations.

The method used for backfilling and compacting the backfill material shall produce 95% compaction (modified proctor). Should the contractor's methods not produce these results the Contractor will be required to alter or change the method being used so that the resultant backfill will be satisfactory to the Engineer. Should the Contractor be required to alter or change the method being used, no additional compensation will be allowed.

When sheeting and bracing have been used, sufficient bracing shall be left across the trench as the backfilling progresses to hold the sides firmly in place without caving or settlement. This bracing shall be removed as soon as practicable. Any depressions that may develop within the area involved in the construction operation due to settlement of the backfilling material shall be filled in a manner meeting the approval of the Engineer.

When the Contractor construct the trench with sloped sides or benches backfilling for the full width of the excavation shall be as herein before specified, except no additional compensation will be allowed for trench backfill material required outside the limits of the specified trench width.

ii. Non-Paved Areas: - When ducts are constructed outside the limits of pavements as described in Part A, aggregate backfill will not be required above the top of duct, contractor may use the originally excavated materials. Compaction of the excavated materials shall be by Method 1 as outlined in Article 542.04 of the Standard Specifications.

Aggregate backfill will still be required to fill any voids under a/or adjacent to the top of duct.

Trench backfill, CA-6, shall be furnished for backfilling to the full width of the trench to the neat lines in areas requiring aggregate backfill only. It will be measured in cubic yards in place, except that the quantity for which payment will be made shall not exceed the volume of the trench as computed by using the actual depth of the trench to the top of the concrete duct, the actual length as measured along the center of the concrete duct and by using a maximum trench width. Any trench backfill required in excess of the maximum quantity herein specified shall be furnished by the Contractor at the Contractor's expense. Actual trench excavation may vary due to depth, soil conditions and to meet OSHA and all other State, Federal and Local safety requirements. No additional compensation shall be made for this item, and such work shall be considered incidental to the pay item.

Method of Measurement: Placing of Trench backfill, CA-6, shall be visually observed by the Engineer and measured for payment in place to the neat lines as specified from the crown top of concrete to within 6" of final grade, to allow for sodding and 6" of black dirt or to within 12 inches of the finished pavement grade plus 6 inches of subbase to allow for the street pavement as shown on the details. The table below indicates the duct bank configurations for backfilling, for various sizes of duct banks or as directed by the Engineer.

TYPICAL DUCT BANK SIZE FOR BACK FILLING

12 Way, 6x6" DIA or 2x5" DIA or 2x3" DIA (2H x 6W)

6 Way, 6 x6" DIA or 6x5"DIA or 6 x3"DIA (2Hx 3W)

6 Way, 6 x6" DIA or 6x5"DIA or 6 x3" DIA (1Hx 6W)

4-Way, 4 x 6" DIA or 4x 5" DIA or 4x3"DIA (1Hx4W)

4-Way, 4 x 6" DIA or 4x 5"DIA or 4x 3" DIA (2Hx2W)

3-Way. 3 x 6" DIA or 3x5"DIA or 3x 3" DIA (1Hx3W)

2-Way, 2 x 6" DIA or 2x 5" DIA or 2x 3" DIA (1Hx2W)

1-Way. 1x 6" DIA or 1x 5"DIA or 1x 3"DIA 1Hx1W)

Contractor to see construction drawings for additional duct sections that are not shown above but included in the project.

No compensation will be allowed for trench backfill required below the top of the concrete duct or for originally excavated material used to backfill in Non-Paved Areas.

Basis of Payment: This work shall be paid for at the contract unit price per cubic yard, for TRENCH BACKFILL, measure as specified, which price shall include payment for furnishing the coarse aggregate, excavation, backfilling and compacting, and incidental materials and collateral work to complete the work as specified.

CONTROLLED LOW – STRENGTH MATERIALS

Description: This work shall consist of furnishing, transporting, and placing Controlled Low Strength Material (CLSM), in accordance with Section 593 of the IDOT Standard Specifications except as herein modified.

When backfilling electrical ducts, the mix shall be distributed evenly on each side of the pipe culvert or conduit to prevent movement. To prevent uplift of the duct, the first layer shall stop at one-fourth the height of the duct. After settlement of the first layer, as determined by the Engineer, the second layer shall stop at one-half the height of the duct. After settlement of the second layer, as determined by the Engineer, the remainder of the trench shall be filled.

Method of Measurement: CLSM shall be measured for payment in place to the trench neat lines as specified from the crown top of concrete to within 6" of final grade, to allow for sodding and 6" of black dirt or to within 12 inches of the finished pavement grade plus 6 inches of sub base to allow for the street pavement as shown on the details. The table below indicates the duct bank configurations for backfilling for various sizes of duct banks or as directed by the Engineer.

TYPICAL DUCT BANK SIZE

12 Way, 6x6" DIA or 2x5" DIA or 2x3" DIA (2H x 6W)

6 Way, 6 x6" DIA or 6x5"DIA or 6 x3"DIA (2Hx 3W)

6 Way, 6 x6" DIA or 6x5" DIA or 6 x3" DIA (1Hx 6W)

4-Way, 4 x 6" DIA or 4x 5" DIA or 4x3"DIA (1Hx4W)

4-Way, 4 x 6" DIA or 4x 5"DIA or 4x 3" DIA (2Hx2W)

3-Way, 3 x 6" DIA or 3x5"DIA or 3x 3" DIA (1Hx3W)

2-Way, 2 x 6" DIA or 2x 5" DIA or 2x 3" DIA (1Hx2W)

1-Way, 1x 6" DIA or 1x 5"DIA or 1x 3"DIA 1Hx1W)

Contractor to see drawings for additional duct sections not shown above but included in the project.

Measurement for CLSM around manholes will not be measured separately but shall be considered included in the unit price of the manhole.

Basis of Payment: This work will be paid for at the contract unit price per cubic yard for CONTROLLED LOW-STRENGTH MATERIALS, and including all equipment, labor and incidentals required performing the work as specified.

COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT

Description: This work shall be performed in accordance with Sections 440 and 606 of the IDOT Standard Specifications except as here in modified. The work shall consist of the removal and replacement of concrete curb and gutters of various types and sizes at the locations shown on the plan, or as directed by the Engineer, the preparation of the subgrade and base and the placement of a Portland cement concrete curb of the types specified on the plans.

See contract plans for City of Naperville curb and gutter details.

Curb and curb and gutters of all types such as: mountable curb and gutter, type B6.12 barrier curb, 6" concrete curb type B or combination concrete curb and gutter, and depressed of all types are to be removed and replaced as indicated on the plans and marked by the Engineer in the field. Curb and gutter damaged by the Contractor which is not marked for removal shall be replaced at the Contractor's expense.

Method of Measurement: Combination Concrete Curb and Gutter Removal & Replacement will be measured for payment in place along the flow line of the curb and gutter in feet, which will be calculated by the field measurements. Measurement shall be considered full compensation for saw cutting, sealing, joint sealant, expansion joints, forms of all types, form materials, epoxy coated rebars, control joints, finishing, excavating, steel plating, removal and disposal of excavated materials, removal of trench backfill to match existing pavement and curb and gutter sections, concrete, placing of tack coat and bituminous surface course, temporary asphalt patches, line and grade, and any other labor, equipment, tools or materials necessary to complete this item to the satisfaction of the Engineer. All curb and gutters installed shall be useable as intended. All vandalism or damage of any kind shall be cause for replacement at Contractor's cost.

Basis of Payment: This work shall be paid for at the contract unit price per foot for COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT, regardless of the various types shown on the plans which price shall include all required concrete, expansion joints, forms, barricades, reinforcement steels, disposal of materials, subgrade preparation, protection of the work, all materials, labor and equipment and appurtenances required for a complete item.

SIDEWALK REMOVAL AND REPLACEMENT (SPECIAL)

Description: This work shall be performed in accordance with Sections 424 and 440 of the IDOT Standard Specifications except as herein modified. This item shall consist of the removal of existing P.C.C. sidewalk at the locations shown on the plans, or as directed by the Engineer. This item shall also include the preparation of the subgrade and base, and the placement of a P.C.C. sidewalk of the width and thickness specified on the plans.

All sidewalk shall be replaced with 5-inch depth Portland Cement Concrete. Any adjustments to the subgrade (excavation or fill) shall be considered included in the price of the sidewalk. Any necessary fill material shall be compacted CA-6 material. Compaction requirements shall be per the Standard Specifications.

Sidewalk thickness increases to 6 inches when it is part of a residential driveway and 8 inches thick when it is part of a commercial driveway.

Sidewalk to be removed shall be as indicated on the plans and marked by the Engineer in the field. Panels damaged by the Contractor that are not marked for removal shall be replaced at the Contractor's expense.

Sidewalk installation shall be done only from April 15 to November 15. All sidewalks removed and/or not completed before November 15 are to be temporarily patched for winter service using Hot Mix Asphalt material or other approved hard surface material at no additional expense to the City and are to be maintained by the Contractor until the permanent sidewalk can be placed.

See contract drawings for City of Naperville standard sidewalk details.

Method of Measurement: Sidewalk Removal and Replacement (Special) will be measured for payment in place, and the area computed in square feet. Measurement shall be considered full compensation for saw cutting, expansion joints, form materials, finishing and tooling, handicapped ramps and coloring, excavating, steel plating, removal and disposal of excavated materials,

removal and installation of trench backfill to prepare sidewalk to match existing sidewalk, concrete placing and finishing, 6 inches of black dirt and sod, placing of temporary cold patch and/or CA-6 for winter, use of steel plates across driveways, 2 coats of curing/sealing compound, line and grade, pressure washing of adjacent sidewalks to remove grease, stains or other materials necessary to complete this item to the satisfaction of the Engineer. All sidewalks installed shall be useable as intended. All vandalism or damage of any kind shall be cause for replacement at Contractor's cost.

Basis of Payment: This work shall be paid for at the contract unit price per square foot for SIDEWALK REMOVAL AND REPLACEMENT (SPECIAL), of the thickness specified, which price shall include all required expansion joints, special texturing, variable height edge treatments at sidewalk ramps, finishing, sealing of the concrete, expansion joints, coloring, disposal and subgrade preparation, protection of the work, all materials, labor, equipment and appurtenances required for a complete item.

PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL AND REPLACEMENT

Description: This work shall be performed in accordance with Sections 423 and 440 of the IDOT Standard Specifications except as herein modified. The work includes removal of existing PCC driveway and the installation of PCC driveway sections at any required location.

Residential driveways are 6 inches thick minimum PCC concrete and commercial driveways are 8 inches thick PCC concrete minimum. Any adjustments to the subgrade (excavation or fill) shall be considered included in the price of the driveway. Any necessary fill material shall be compacted CA-6 material. Compaction requirements shall be per the Standard Specifications.

Driveway installation shall be done only from April 15 to November 15. All driveways removed and/or not completed before November 15 are to be temporarily patched for winter service using Hot Mix Asphalt material or other approved hard surface material at no additional expense to the City and are to be maintained by the Contractor until the permanent driveway can be placed.

Pavement fabric reinforcement shall be included with all driveway construction and shall be 6" X 6" six gauge steel mesh, which will be installed 3" above the compacted subbase stone. Contraction joints as necessary, (10' to 15' apart) shall be tooled into the newly placed concrete. Expansion joints shall be placed against existing pavements.

All exposed surfaces shall be cured with a sealant compound Super Rez Seal or equal, in two coats.

Provide full depth premolded joint filler 2" thick for expansion joints at walk junctions and intersections where walks about building or platforms. Extend joint fillers full width and depth of joint. Place top of joint filler flush with finished concrete surface. Furnish joint fillers in one-piece lengths for full width being placed, wherever possible. Where more than one length is required, lace or clip joint filler sections together. Protect top edge of joint filler during concrete placement with a metal cap or other temporary material. Remove protection after concrete has been placed on both sides of joint.

See contract plans for City of Naperville typical driveway details.

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Repair or replace broken defective work, as directed by Engineer. Protect pavement from damage until acceptance of work. Maintain driveway as clean as possible by removing surface stains and spillage of materials as they occur. Sweep concrete sidewalks and wash free of stains, discolorations, dirt and other foreign material prior to final inspection.

Method of Measurement: Portland Cement Concrete Driveway Removal and Replacement shall be measured for payment, in place complete, in square yards. Measurement shall considered full compensation for saw cutting, excavating, steel plating, removal and disposal of excavated materials, removal and installation of CA-6 backfill to prepare driveway to match existing sidewalk, pavement, and curb and gutter, concrete placing and finishing, form materials, sealants, expansion joints, wire mesh, 6 inches of black dirt and sod, placing of temporary cold patch and/or CA-6 for winter, use of steel plates across driveways, 2 coats of curing/sealing compound, line and grade, pressure washing of adjacent sidewalks to remove grease, stains or other materials necessary to complete this item to the satisfaction of the Engineer. All driveways installed shall be useable as intended. All vandalism or damage of any kind shall be cause for replacement at Contractor's cost.

Basis of Payment: The concrete driveway will be paid for at the contract unit price per square yard for PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL AND REPLACEMENT, which price shall include the installation of concrete driveway sections at locations as shown on the drawings.

SODDING, SPECIAL

Description: This work shall be performed in accordance with Sections 211, 250 and 252 of the IDOT Standard Specifications except as herein modified. This work shall include the placement of topsoil, sodding and fertilizing of all disturbed areas along the proposed improvements at the location shown on the plan or as directed by the Engineer.

Materials shall be in accordance with Article 1081.03 of the Standard Specifications. Native Sod comparable to the local grasses shall be used. Sod grown in areas of high organic material such as peat shall not be used.

See contract plans for additional for additional information.

A minimum of 6 inches of topsoil shall be placed over all disturbed areas. All soil surfaces shall be moist when the sod is applied.

Fertilizer shall be applied at the following rates:

Nitrogen Fertilizer Nutrients 90 lbs/acre
Phosphorus Fertilizer Nutrients 54 lbs/acre
Potassium Fertilizer Nutrients 36 lbs/acre

Method of Measurement: Sodding, Special shall be measured per square yard. All turfed areas restored with sod within the limits of restoration will be eligible for payment. Areas beyond the public right-of-way or the easement areas shown that are disturbed by the Contractor's activities shall be restored to equal or better condition by the Contractor at the Contractor's expense. In no case shall the pay limits for restoration extend beyond 30' (feet) from the center of the proposed utility being constructed.

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All vandalism or damage of any kind shall be cause for replacement at Contractor's cost.

Basis of Payment: Payment for sodding shall be made at the contract unit price bid per square yard for SODDING, SPECIAL.

SEEDING, CLASS 1A (SPECIAL)

Description: This work shall be performed in accordance with Sections 211 and 250 of the IDOT Standard Specifications except as herein modified. This work shall include the placement of topsoil, seeding and fertilizing of all disturbed areas are not specified to be sodded along the proposed improvements at the location shown on the plan or as directed by the Engineer.

Seeding and fertilizing materials shall be in accordance with Section 250 of the Standard Specifications. Seed shall be Class 1A, Salt Tolerant Lawn Mixture.

A minimum of 6 inches of topsoil shall be placed over all disturbed areas. All soil surfaces shall be moist when the sod is applied.

Fertilizer shall be applied at the following rates:

Nitrogen Fertilizer Nutrients	90 lbs/acre
Phosphorus Fertilizer Nutrients	54 lbs/acre
Potassium Fertilizer Nutrients	36 lbs/acre

Areas beyond the public right-of-way or the easement areas shown that are disturbed by the Contractor's activities shall be restored to equal or better condition by the Contractor at the Contractor's expense. In no case shall the pay limits for restoration extend beyond 30' (feet) from the center of the proposed utility being constructed.

All seeded areas shall be mowed four (4) times to a height of three (3) inches. The cut material shall not be wind rowed or left in a lumpy condition but evenly distributed. Areas beyond the limits shown on the restoration plan shall be restored to better or equal conditions at the Contractor's expense.

See contract plans for additional information.

All vandalism or damage of any kind shall be cause for replacement at Contractor's cost.

Basis of Payment: Payment shall be made at the contract unit price per acre for SEEDING, CLASS 1A (SPECIAL). Payment shall be full compensation for all seed, fertilizer, watering, other materials, labor, equipment and incidentals to complete the item on the plan and as specified.

MULCH, SPECIAL

This work shall be performed in accordance with Section 251 of the IDOT Standard Specifications except as herein modified. This item of work shall include the mulching of seeded areas along the proposed improvements at the locations shown on the plan or as directed by the Engineer.

Materials and construction methods shall be in conformance with Section 251 of the Standard Specifications. Mulch shall be applied as hydraulic mulch as specified in Article 251.03 (c), Method 3 of the Standard Specifications. Mulch shall be applied to all seeded areas within 24 hours from the time seed has been applied.

All vandalism or damage of any kind shall be cause for replacement at Contractor's cost.

Method of Measurement: Mulch, Special will be measured in place in acres of surface area mulched.

Basis of Payment: Payment will be paid for at the contract unit price per acre for MULCH, SPECIAL which price shall include all materials, labor, and equipment for placing the mulch over seeded areas as specified.

RIPRAP, SPECIAL

Description: This work shall be in accordance with Section 281 of the IDOT Standard Specifications except as herein modified: This item shall consist of the removal of existing riprap and replacement with new riprap of the type and size at the location shown on the plans, or as directed by the Engineer.

Proposed riprap shall be Gradation #3, 12" minimum thickness.

Method of Measurement: Riprap (Special) will be measured for payment in place of the final placement, and the area computed in square yards.

Basis of Payment: This work shall be paid for at the contract unit price per square yard for RIPRAP, SPECIAL of the type shown on the plans and specified herein, which price shall include all material, labor, equipment and appurtenances required for a complete item.

CONSTRUCTION LAYOUT

<u>Description:</u> This work shall be performed in accordance with Check Sheet #10 of the IDOT Supplemental Specifications and Recurring Special Provisions except as herein noted.

The Contractor will be required to furnish and place construction layout stakes for this project. The Contractor shall establish a referenced centerline of survey and establish benchmarks along the line of the improvement outside construction limits. Locating and referencing the centerline of survey consists of locating and referencing control points such as point of curvature, points right of way lines, property corners, or of tangent and sufficient points on tangent to provide a line of sight. Control points, center line and benchmarks set by the Contractor shall be identified in the field with documentation and submitted to the City of Naperville prior to proceeding with construction.

The Contractor shall provide competent field forces directed by a Professional Land Surveyor or Registered Professional Engineer, and shall set all additional stakes for this project, lines and any other horizontal or vertical controls, including supplementary benchmarks, necessary to secure a correct layout of the work.

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

All conduit lengths shall be measured to the tenths of a foot. The Contractor is responsible for installing all duct sections and maintaining all construction activities inside the limits of the City of Naperville's right of way. For conduits located within roadways, the Contractor shall use the dedicated 66 and 80-foot or 100 foot road right of way. All lot line work shall use the recorded easements. These easements are shown on the easement maps provided; these maps are approximate locations of recorded easements taken from records in file. Records filed in the county shall resolve all discrepancies. The information shall be obtained and interpreted by the Surveyor for the Contractor and reviewed by the City of Naperville

The Contractor shall obtain and direct the services of a land surveying company to measure the installation of the duct bank by the open cut method and field document the installation of the open cut method of conduit installation, including vaults, manholes handholes splice boxes and pedestals. The surveyor is required to establish the limits of the rights of way, limits of the easements, property lines, center of duct run, with labeled stakes every 50 feet as the route shown on drawings provided. Wooden stakes shall be driven at a minimum of 50-foot intervals and /or at a sufficient number of additional locations to allow the Contractor a construction line and grade to follow for installation of the conduit and stay within the limits of the right-of-way.

The surveyor shall record the location of the new duct as being installed and measure widths, depths and lengths of trenches manholes, handholes, and splice boxes, with elevations and prepare profile of trench bottom with stationing, offsets angles and monitor the progress of the work to ensure the conduit duct bank stays within limits of the rights of way and the conduit run does not exceed 235 degrees of bends in 750 feet. All fences, monuments curb and gutter and obstructions shall be identified and recorded showing all measurements to the new duct and relative position on the right of way.

The surveyor shall measure on a straight line, point to point on a plan view. The surveyor shall measure, identify, and record all lengths, to the nearest tenth of an inch, of conduit installed from transformer vault to transformer vault, vault to pole, switch gear vault to transformer vault, new transformer vault to existing transformer, handhole vault to transformer vault, all road crossings and face of manhole to face of manhole, handhole to manhole and etc. All vaults, manholes splice boxes, and handholes shall be center and perimeter staked to allow the Contractor to install the vault and/or handhole and /or manhole to allow the installation of the new conduit directly into the vault. All manholes are measured from face of manhole to face of manhole.

All excavations shall be dimensioned, provide grade, elevations top and bottom of excavation based on a bench mark, provide depth of digging, and excavation identified and tied into existing streets, monuments and home addresses. This Information is required for each excavation, which includes all pits, vaults, trenches and other excavations required to perform the work. A field book record including the information above plus showing, the day, dates and what type and quantity of work was performed shall be furnished to the City on completion of the work. This work is priced

as a lump sum for the entire project for a complete job. In the event the work is divided between Contractors, this work shall be divided up to match the work being awarded.

Basis of Payment: This work will be paid for at the contract lump sum for CONSTRUCTION LAYOUT. This work shall include all materials, equipment and labor, services of a registered land surveyor and party chief, transportation, communications, measurements, tools, sketches, profiles, stationing, dimensions, cross sections, GPS coordinates, elevations, counts, bench marks, drawings that are dated and stamped, calculations with documentation, as required or needed to establish, maintain and correct, the lines and grades as described herein, as well as reestablishing lost or damaged control points and property corners. The surveyor shall be available for the duration of the project.

ROCK EXCAVATION

Description: This work shall be preformed in accordance with Section 202 of the IDOT Standard Specifications except as herein.

Rock excavation shall include all hard, solid rock ledges, bedded deposits and uncertified masses and all conglomerate deposits or any other material so firmly cemented that, in the opinion of the Engineer, it is not practical to excavate and remove same with a 225 net flywheel horsepower hydraulic backhoe or equal, except after continuous use of pneumatic tools or hammering. No soft or disintegrated rock which can be removed with a pick, grinding or jack hammer (40pounds): no loose, shaken or previously broken rock; and no rock which may fall into the excavation from outside the limits of excavation will be classified as rock excavation. Rock excavation shall also include all rock boulders necessary to be removed having a volume of three cubic yards or more.

When rock is encountered, it shall be stripped of earth and the Engineer notified and given proper time to measure the same before removal. Any rock that has been removed prior to measurement by the Engineer will not be classified as rock excavation. To be classified as rock, the material shall meet a very high RDQ classification.

Payment will be made for rock excavation only within a line eighteen inches outside the concrete walls of the manhole or within the limits of a trench one foot wider than the width of duct bank, in case of trench excavation, and to a depth six inches below plan elevations for bottom of foundation or duct bank, or to the exact limits of rock cut contours or cross sections.

The use of explosives will not be permitted with any type of rock excavation.

Basis of Payment: This work will be paid for at the contract unit price per cubic yard for ROCK EXCAVATION. This price shall be full compensation for furnishing all materials; for all preparation, excavation and disposal of rock; and for all labor, equipment, tools and incidentals necessary to complete the item.

ROD AND MANDREL

Description: The Contractor shall rod, mandrel, swab, clean, and lubricate all ducts installed. Prior to acceptance, each 3", 5" or 6" conduit will be cleaned and tested by pulling a wooden or steel mandrel of 5 1/4 "diameter by 6 inch long with eyes on both ends for 6inch conduit or 4 1/4"

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diameter by 5 inch long with eyes on both ends for 5inch conduit or 2 1/4" inch diameter by 4 inch long with eyes on both ends for 3 inch conduit.

The Contractor shall rod, mandrel, swab, clean, and lubricate all ducts extended, picked up, added to or altered. The Contractor shall rod and mandrel the entire new and existing duct section. Prior to acceptance, each 3", 5" or 6" conduit will be cleaned and tested by pulling a wooden or steel mandrel of 5 1/4 "diameter by 6 inch long with eyes on both ends for 6inch conduit or 4 1/4" diameter by 5 inch long with eyes on both ends for 5inch conduit or 2 1/4" inch diameter by 4 inch long with eyes on both ends for 3 inch conduit.

The Contractor shall furnish, fabricate and use the proper diameter mandrel for each conduit. The mandrel shall be to be approved by CITY OF NAPERVILLE. The Contractor shall use the approved mandrels to mandrel the ducts. The Company shall observe the mandrel installation. A nylon pulling line 1/8th inch in diameter or detectable Mule tape or #12 copper wire THHN shall be furnished by CITY OF NAPERVILLE shall be pulled through the ducts and left secured to the top of the Vault or structure and a 12 inch tail will extend outside the enclosure to allow the locator to put a tone on the detectable mule tape or #12 wire. . The conduit ends shall be sealed, capped and plugged on both ends, and a tail left through the sealed ends of the conduit for others to pull cable at a latter date. The drawings shall be marked and noted that all ducts have been mandreled and signed by both CITY OF NAPERVILLE and the Contractor. The Contractor to verify all ducts are clear and sealed for future use when submitting this item for payment. . Any ducts found unclear within one year after installation shall be dug up by the Contractor and cleared at no cost to the City of Naperville. However, if the area where the blockage is located can be excavated by the Contractor, and it can be determined upon inspection that the blockage was definitely caused by some unknown party then the cost of repairing the conduit and excavating shall be borne by the City of Naperville, but if after excavating it is not clear or there is some doubt that the blockage was not caused by another party then the Contractor shall repair the conduit, close up the excavation and landscape at the Contractors cost. The City of Naperville shall make the final decision.

Method of Measurement: Measurement is for the actual linear length as measured by measuring the tape or nylon rope used to mandrell.and is measured from the end of the duct mouth to the other end of the duct mouth of each duct in the duct package. . Training of the of the rope, cleaning the manhole, cleaning the conduits, pumping the manhole/ hand hole/ switchgear vault, sealing the conduit, in handhold switch gear vault or manholes plus setup is incidental to the cost of the work

Basis of Payment: This work shall be paid for at the contract unit price, per foot, for ROD AND MANDEL. This price shall be full compensation for furnishing all materials; for all preparation, all cleaning, all dirt, waste, and gravel removal, pumping, disposal of all removed materials, and for all labor, equipment, tools, consumables and incidentals necessary to complete the item.

ADDITIONAL GROUND ROD INSTALLATION

Description: This work shall consist of installing additional ground roads at each new installation. One (1) 10-foot ground rod shall be installed at each transformer vault and four (4)-10 foot ground rods at each fuse, plug or switchgear vault, handhole, splice box, manhole and One (1)-10 foot ground rod at each riser pole. Install 50 feet of #4 stranded copper ground wire around the inside perimeter of each vault, handhole splice box, with connections per specification

The Contractor shall have tested each and every ground rod installed as per specification attached. The Contractor shall test all ground rods installed and the total system of rods and wire. The Contractor shall record data on forms supplied and give to the Resident Project Inspector Representative. The Contractor is advised the cost of the above work is included in the pricing for vaults; handholes splice boxes and riser installations for a complete job.

Basis of Payment: This work shall be paid for at the contract unit price, per each, for ADDITIONAL GROUND ROD INSTALLATION. This price shall be full compensation for installing and testing each additional 10 foot copper clad ground rod or each 10 foot stainless steel ground rod installed 12 inches below grade, including connecting to the existing grounding system with 10 feet of 4/0 copper 7 strand wire 12 inches below grade and testing the system as described above to 25 ohms with documentation, picking up grounding materials from the City storeroom, plus furnishing all minor materials, all preparation, cleaning, all dirt, waste, and gravel removal, pumping, disposal of all removed materials, and for all labor, equipment, tools, consumables and incidentals necessary to complete the item.

CONDUIT RISER ASSEMBLY

Description: This work shall consist of installing conduit riser assemblies of the size indicated on the plans. The Contractor shall install a riser (conduits to and up an existing or new pole).

All materials will be supplied by the City of Naperville except for straight steel conduit or schedule 80 PVC. The Contractor will be responsible to load and transport all materials supplied by the City as specified in the General Specifications, except for the schedule 80 PVC or ridged galvanized steel 10 foot lengths of conduit with couplings and adapters if shown on the drawings. The 10 foot straight schedule 80 PVC of 6 inch Diameter conduit with couplings shall be furnished and installed by the Contractor and included in the pricing for this item.

All risers installed shall pass the Rod and Mandrel procedure to be accepted by the City.

The Contractor shall hold, support, guy, attach and provide all temporary work and materials, tools, consumables and labor to brace the pole against leaning, turning, twisting, falling or otherwise becoming unstable. The use of a truck to hold the pole is not acceptable. All existing conductors on the poles shall remain and in service.

The Contractor will take all the required precautions when working in proximity to the poles (Contractor to follow NESC Codebook, Section 36 and O.S.H.A regulation for live line work), and shall assume the lines are energized at all times. All restoration is included. All concrete work is included

An outage to perform this work is determined by the condition of the City of Naperville's electrical system and may not be available in the required time frame. This condition is normal and is considered incidental to the work. A 96-hour notice is required for each and every work location. Any delay in completing the work due to outage restrictions or lack of an outage is not a reason for additional compensation and will not be considered.

The work includes two, 90 degree 3-inch steel bends or two 90 degree 6-inch steel bends or two 90 degree 5 inch steel bends at the base of a pole, and one 3-inch or 5-inch or 6-inch schedule 80

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PVC riser section attached to the pole, install grounds and test, one conduit is sealed at ground line the other sealed at the 25 foot mark, 3-inch, 5-inch or 6-inch schedule 40 PVC attached to brackets to the pole and trained 25 feet up the pole as work to be completed at the locations and quantities required and as shown on the drawings.

This work includes the installation of sufficient number of 45, and 90 degree bends with pieces of conduit to extend to the pole. The Contractor shall provide the following in and around the area and at the site, CA-6 backfill materials, black dirt, sod, grading, landscaping, stone/rock removal, tunneling, hand digging, install new fencing, removal of fencing, provide space for work area, sidewalk replacement, curb and gutter replacement, tree and brush protection, arborist services, and/or replacement and dispose of all removed materials off site. See drawing C30-1900 Sheets 1 through 11 on Drawing 58199 sheet 12 of 20 for riser requirements and is included in the pricing.

Hand digging is considered part of the work. This work includes the hand digging and/or machine aided digging to install 2-6inch 90 degree steel bends, plugs, couplings, grounds and 1-10 foot long pieces of conduit to extend out from the pole. In addition, installation includes hand digging a trench 10 feet long, 3 feet wide, and 6 feet deep. Dispose of all removed materials off site.

All riser locations must be approved by the City of Naperville before any work is started. All riser locations shall be identified in the field, dimensioned and recorded in the surveyor's field book records after the job is awarded to the Contractor. No claims for extra compensation will be considered for cost incurred because of delay due to a riser change, utility locates, or obtaining approval for said change.

Method of Measurement: This work will be measured per each location where a Conduit Riser is installed.

Basis of Payment: This work shall be paid for at the contract unit price, per each for CONDUIT RISER ASSEMBLY, of the size indicated on the plans. This work includes: all conduits, fencing, bends, pumping, tunneling, tree and brush protection and /or replacement, hand digging, stone/rock removal, leveling, and associated work to install conduit to the riser pole at the existing locations.

PULLING ROPE AND DETECTABLE MULE TAPE

Description: This work includes installing the nylon pulling rope or detectable Mule tape or #12 Copper Thin Wire thru the sealing mechanism by providing a whole large enough to pass the rope, wire or tape through.

The nylon rope, wire or detectable Mule tape shall be secured to prevent accidental rope removal by others. The Contractor shall extend rope, wire or tape to the outside of the equipment and secure by bolting to the equipment leaving a 12 inch tail. The Contractor shall install rope, wire or tape as soon as the pipe has been installed so the detectable tape can be located for the J.U.L.I.E. function. The Contractor is required to install all conduit ends with seals and plugs as permanent and provide additional protection if the Contractor deems it necessary to last for a 5 year service life.

An outage to perform this work is determined by the condition of the City of Naperville's electrical system at the time and may not be available in the required time frame . This condition is normal

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and is considered incidental to the work. A 72-hour notice is required for each and every work location. Any delay in completing the work due to outage restrictions or lack of an outage is not a reason for additional compensation and will not be considered.

No additional compensation shall be paid if the ducts are not sealed and later are found blocked. The Contractor shall bear the cost of all work to repair.

Others shall remove seals and rope when the new transformers and cables are installed. The Contractor shall prepare a drawing showing which conduits have pulling rope, # 12 wire or detectable tape in them as they are installed and provided to the City of Naperville.

Failure to install the rope or tape promptly is a reason to reject the pipe installation. Also the contractor shall take color 11x 8-1/2 inches photographs of all handholes, splice boxes, manholes, switch gear vaults and transformer vaults where a pulling rope, mule tape or wire has been installed. A picture is required of each direction that the conduits leave or enter the electrical facilities from inside the facilities. The Contractor shall make up hand drawn signs with very large legible lettering size that indicates the structure number and direction the picture is looking at. This sign need to be seen in the photograph. The sign needs a date shown on it and the date must be seen in the photograph as well as the structure number and direction.

Basis of Payment: This work shall be paid for at the contract unit price, per foot for PULLING ROPE AND DETECTABLE MULE TAPE.

TREE ROOT PRUNING

Description: This work shall be performed in accordance with Section 201 of the IDOT Standard Specifications except as herein modified. This work shall be completed for all trees encroaching upon the ductbank construction area. Any roots encountered shall be treated with this method as directed by the City. The Contractor shall hire a Registered Arborist and appurtenances necessary to perform tree and evergreen root pruning.

Root pruning using an approved mechanical root pruning saw, or lopper as directed by a Registered Arborist, shall be performed prior to digging where noted on the plans or as directed by the Engineer. Whenever roots of plant material are to remain exposed during construction, the damaged roots are to be removed by cutting them off cleanly. Pruning shall be done in the presence of the Engineer and/or Registered Arborist and in such a manner as to preserve the natural growth habit.

Any damage to the root zone, as determined by the Engineer and/or Arborist shall be compensated by pruning an equivalent amount of the top vegetative growth of the plant material within 1 week following root damage. Fertilizer nutrients shall be applied within 48 hours after root damage occurs. A fertilizer with a 1:1:1 ration shall be applied at the rate of 5 lbs. of nutrients per 1.000 sq. ft.

Application shall be accomplished by placing dry fertilizer in holes in the soil. Holes shall be 8 to 12 inches deep and spaced 2 feet apart in an area beginning 30 inches from the base of the plant. Holes can be punched with a punch bar, dug with a spade, drilled with an auger or any method approved by the engineer. Approximately 0.02 lb. of fertilizer nutrients shall be placed by in each hole [250 holes per 1,000 sq. ft.].

If the Engineer or Arborist determines that the hole method of fertilizer placement is not practical or desirable, an approved method of uniform surface application will be allowed.

In the case of inadequate rainfall, as determined by the Engineer, supplemental water shall be applied within 48 hours of any root damage. The water shall be applied at the rate of 2 gallons per sq. yd. of surface within the root zone of plant material having sustained damage to the root zone. Three subsequent weekly waterings at 2 gallons per sq. yd. shall be applied if deemed necessary by the Engineer. Additional waterings may be required.

Method of Measurement: Measurement will be based on tree root pruning per each tree; this shall include fertilizer nutrients and supplemental watering. Trimming of roots exposed during excavation will not be measured for payment.

Basis of Payment: This work shall be paid for at the contract unit price for each TREE ROOT PRUNING including fertilizer nutrients, supplemental watering and top pruning necessary to maintain the vigor of the tree.

COUNTERPOISE, UNPAVED COUNTERPOISE, PAVED

Description: The Contractor shall install counterpoise at a manhole, handhole or switchgear vault as directed by the Engineer or as shown on the drawings.

The counterpoise shall be installed at the locations in paved and unpaved areas as directed by the Engineer. The work consists of traffic control, excavating, backfilling protecting the work area, restoring pavement to the original condition or better, disposal of all excavated materials off site, picking up and delivering all material from the City of Naperville storeroom to the job site and installing the equipment.

The Contractor shall excavate a trench 18 to 24 inches deep and 6 inches wide for a minimum of 100 feet in a radial direction out from the equipment. A bare #4/0 stranded coated copper conductor shall be installed into the trench backfilled with CA-6 and compacted 6 inch lifts and connected 18 inches below ground to the ground rods previously installed The ground with the counterpoise connected and backfilled shall be tested and resistance measured by the Fall of Potential Method Or Clamp on Method.

A measured resistance of 25 ohms is the acceptable value. If the reading is above 25 ohms the Contractor shall contact the Engineer and another counterpoise may be installed tested and results evaluated.

The disturbed area in unpaved areas shall be fully restored with 6 inches of black dirt and sod.

The disturbed area in paved areas shall be restored with 12 inches of BAM or 2 inches of asphalt and 10-inch thick concrete with 6-inch sub-base of CA-6 in both.

All grounding materials are supplied by the City of Naperville.

Method of Measurement: The work shall be measured per lineal foot of counterpoise.

Basis of Payment: The work shall be paid for at the contract unit price per foot of COUNTERPOISE installed which shall include all trenching, traffic control, installation of materials furnished by the City of Naperville and final restoration.

HAND DIGGING, 0 FT TO 5 FEET IN PAVEMENT
HAND DIGGING, 5 FT TO 20 FEET IN PAVEMENT
HAND DIGGING, 0 FT TO 5 FEET IN UNPAVED AREAS
HAND DIGGING, 5 FT TO 20 FEET IN UNPAVED AREAS

Description: The Contractor shall assemble the necessary equipment, traffic control, materials, customer contacts, and labor to perform an earth excavation to the length and width and to a 5 foot or 20 foot depth and meet all federal and local regulations by hand digging as directed by the Engineer.

The Contractor shall saw cut, remove and install and replace all existing vegetation, a 12 inch thick concrete or 12 inch thick Bam street base, sub-base, provide earth excavation, removal of sod and black dirt, disposal of all materials off site and backfilling with trench backfill CA-6 street base or sod and 6inches of black dirt, provide a Julie, support foreign utilities, restore area to original or better condition by hand digging.

Method of Measurement: The hand digging excavation shall be measured to the straight neat lines required for payment in place and calculated in feet (Length times Width times Depth in cubic yard volume) by the field measurement of straight neat lines. Measurement shall be considered full compensation for saw cutting excavating, steel plates, traffic control removal and disposal of excavated materials off site, street removal and installation removal of landscaping and installation of landscaping, Julie locates, supporting foreign utilities, line and grade, maintaining elevation and all labor tools, equipment, materials, permits, and appurtenances to complete this item to the satisfaction of the Engineer

Basis of Payment: The work shall be paid for at the contract unit price per cubic yard, for HAND DIGGING in various areas, regardless of the various types and locations shown on the plans which will include all required PCC concrete, saw cutting, expansion joints, forms landscaping, material removal and disposal off site, traffic control protection work, materials falling into excavation shall be removed and replaced but not included in measurement, backfill materials placed and compacted in 6 inch lifts, bituminous materials, tack coat, compaction of sub-base and place sub-base backfill CA-6 materials.

BITUMINOUS DRIVEWAY REMOVAL AND REPLACMENT

This work shall be performed in accordance with Section 406 of the IDOT Standard Specifications except as herein modified. The work will include the installation and removal of hot mix asphalt (bituminous) driveway sections at any required location, as shown on the plan or as directed by the Engineer.

See contract plans for City of Naperville for typical driveway details for residential. Substitute hot mix asphalt for concrete.

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The Contractor shall remove all existing pavement materials including sub-base, wearing surface and aggregate and disposal of all existing pavement, gutter inlets, entrances combination curb and gutter, backfill materials in preparation of subsequent construction.

This work shall consist of a hot-mix asphalt driveway pavement on a prepared sub-base of 6 inches of compacted crushed stone (CA-6). Sub-grade preparation, crushed stone base and all related work for driveway pavement shall be included in the cost of the work. The asphalt shall be laid in 2 lifts as follows:

Single-family residential drives will be 2 inch thick Hot-Mix Asphalt Binder Course Course, IL-19.0, N70, 2 inch Hot-Mix Asphalt Surface Course, Mix "C", N50 with 6 inch sub-base.

Commercial drives will be 10 inch thick Hot-Mix Asphalt Binder Course Course, IL-19.0, N70, 2 inch Hot-Mix Asphalt Surface Course, Mix "C", N50 with 6 inch sub-base.

The edges of the new pavement that are to be adjacent to grassed parkway shall have a neat forty five (45) degree angle bevel compacted and tamped with mechanical means and hand tampers.

Method of Measurement: This work shall be measured along the surface of the completed driveway, in square yards.

Basis of Payment: This item of work shall be paid at the unit contract price, per square yard, for BITUMINOUS DRIVEWAY REMOVAL AND REPLACEMENT of the specified thickness and materials noted above and as shown on the plans.

RESTORATION WORK

Description: This work shall consist of restoration work of the project site not otherwise covered by specific items. The Contractor shall provide landscaping and tree work performed by a registered certified landscaper. The Restoration work shall include all landscaping work including transplanting, removing, installing, grading, re-grading, hauling, unloading, storing, placing, hand digging, clearing, grubbing, pruning, trimming, shaping, planting tree(s) and evergreen(s), root and/or bush pruning, raking, watering trees, gardens, flowers, bushes and evergreens; fences of all sizes, excavated materials shall be removed off-site, dog fences, security systems, alarms, sprinkler systems cable TV phone cables, black dirt, sod, re-sod, decorative stone modular walls, cobbles, and any other landscape or surface features.

The Contractor shall make a careful examination of the location, field traverse the entire route of the project, observe and note existing site conditions and nature of the proposed work, as well as the drawings and specifications, and all other Contract Documents in connection with the work and services to be performed under this Contract.

Furthermore, he shall make a thorough investigation of potential interference and difficulties he may encounter such as, underground utilities, trees, fences, gardens, shrubs, out buildings, landscaping, but not limited to, road conditions or boulders and debris along fence lines for the proper and complete execution of all work specified herein and/or shown or called for on the drawings.

Lack of knowledge of existing conditions or foreseeable conditions that will create difficulties or encumbrances in the execution of the work shall not be acceptable as an excuse for any failure on the part of the Contractor to fulfill in every detail all of the requirements of the restoration. Furthermore, a lack of knowledge will not be accepted as basis for any claim whatsoever for additional or extra compensation.

The Contractor shall perform all labor plus furnish and install all materials to restore all of the City of Naperville's rights of way and easements to the original or better condition. The Contractor is advised the property owners shall be contacted and consulted on each and every area of landscaping to be performed by the Contractor. An agreement by the property owners as to be quality and quantity of the work is essential for acceptance of the restoration by the City of Naperville

The Contractor is advised the property owner must be satisfied with all aspects of the restoration. The Contractor shall start all area's that have been disrupted, dug on, compacted, or other wise used by the Contractor's activity. All restoration shall begin within three weeks after the initial entry onto the customers' property. The Contractor shall make every effort to finish each parcel of property in an orderly and continuous effort to the finish. Large lapses of time from starting to finish are not acceptable. The Contractor shall be requested to increase the work force at no cost to speed up the restoration process when the restoration process takes longer than 6 weeks at any location.

The work area shall be kept clean and good housekeeping is the rule of the day. The storing stock piling or leaving materials in the work area over night is not acceptable. The equipment shall be returned to the staging areas at the end of each day. All personal vehicles shall not be parked on any of the City of Naperville streets.

The Contractor shall install remove and transplant bushes, trees and other vegetation in areas that have been dug, excavated disrupted and damaged or worn by use. The cost of such activity shall be included in this item.

The Landscaping period is usually November 1 to April 1. The Contractor shall finish all landscaping started in the work year by November 1 of the year started or sooner.

The Contractor shall install only sod and 6 inches of black dirt when green areas, grass areas of all types, and/or dirt areas have been dug, excavated, disrupted, damaged or worn by use. All landscaping shall be furnished, installed, rolled, and supplied and applied with sufficient quantities of water and fertilizer to promote growth.

Warranty provisions shall be in accordance with the Standard Specifications for the specific restoration item installed.

The Contractor shall provide a lump sum that is the total cost of all landscaping and restoration of the City of Naperville's rights of ways and easements, which is to be done and required but not covered under any another price item or is covered by a price item but not in the quantities necessary for a complete the job. This lump sum includes, but not limited to, all labor, transportation, materials, hauling, loading, unloading, placing, installing, removing, transferring, temporary work of all types, tools, plant materials of all types, disposal of all materials off-site.

Basis of Payment: This work will be paid for at the contract price, Lump Sum, for RESTORATION WORK and shall include all labor, materials, equipment transportation and incidentals required to perform the work for a complete job.

UNDER BRIDGE CONDUIT SYSTEM

Description: This work will consist of installing an under bridge conduit support system as shown on the Plans or as directed by the Engineer. Work under this item will include, but are not limited to: furnishing and installing inserts; PVC and steel conduit; couplings; male and female adapters for steel conduit; concrete encasement for steel conduit; hanger assemblies; expansion joints; stainless steel straps; angle braces, threaded rod, spacers, and all nuts, bolts, washers and connectors. The Contractor shall weld of stain less steel strap and/or braces as required. Adjustable braces, stop joints, 5 degree coupling, require prefitting of all materials.

Materials: The Contractor will furnish, install, fabricate, form, assemble, and drill, trim. Grind, bore and chamfer holes as required, stainless steel weld bracing, adjust, align, modify, level and cut all materials as required for complete installation of conduit under the bridge. (1 conduit high, 6 conduits wide.)

All materials are furnished and installed by the Contractor. Condux Corporation manufactures all inserts and inserts nuts. (Ridged or swivel) The Condux Corporation of Mankato, Minnesota is the approved supplier of all bridge materials except 10 foot straight galvanized steel ridged conduits. Material substitutions will be allowed only with approval of the City of Naperville, DPU-E. All steel 6" rigid steel with couplings 10 feet long is supplied by the Contractor. Contractor shall supply all steel to schedule 40 PVC couplings. The Contractor shall furnish, install and assemble all steel conduit through the bridge abutment walls.

All PVC conduit and bends used on the job will conform to the following: DPU-E Code 285-100-00070 Six (6) inch Schedule 40 heavy wall PVC conduit, supplied in 10' lengths with one belled end. Conduit must comply with UL standards 651 and NEMA TC2-1990 and must be shown on each length of conduit. Carlon 4907, J-M Manufacturing Co. Inc. 40600, Cantex A52GA12, National 333706020 or DPU-E approved equal. All steel except for the inserts and all rods are 316 Stainless Steel. Contractor shall have certified welders to perform stainless steel welding on braces for the under bridge support.

Construction Requirements: The conduit run will be supported by inserts installed by the Contractor in the quantities and locations shown on the Plans. The Contractor will install temperature expansion couplings as shown on the electrical portion of the contract plans.

The Contractor will be responsible for field verification of all frame member and diaphragm clearances prior to beginning installation. The Contractor will adjust conduit elevations and/or alignment to avoid any conflict. Under no circumstances may the bottom of the Duct Hanger Assemblies extend beneath Low Steel Elevation. Prior to installing, hangar assemblies will be preassembled to be ensuring all pieces fit and meet clearances. Any adjustments necessary or as directed by the Engineer will be done at no additional cost.

All 3/4 bolts will be torqued to 190 feet/pounds. All threaded rod ends will be preened, center punched or spot-welded to prevent nut removal. Cut rod even with nut and above low steel.

The Contractor will stagger all PVC joints under the bridge. Bends under the bridge deck will be Schedule 40 PVC (field bend by hot box or pre-molded).

The section weight per feet of hanger, schedule 40 PVC conduits, nuts, steel braces, spacers, threaded rods and tubing is 24 lbs/foot without cable, with cable it is 120 lbs/foot.

The Contractor will install all materials without entering, leaving or dropping any materials into the river. Fall protection will be provided by the Contractor and is considered included in the cost of this item.

Prior to acceptance, each conduit will be cleaned and tested by pulling a mandrel of appropriate size through the duct. Mandrel sizing will be in accordance with Section 31-1.11 of the Standard Specification for Water and Sewer Main Construction in Illinois. The Contractor will leave the 1/8" diameter nylon pulling rope or detectable mule tape in each of the conduits. The testing and pulling of the mandrel will be done in the presence of the Engineer. Any duct found to be defective or blocked must be cleaned or repaired and re-tested to the satisfaction of the Engineer at the Contractor's expense prior to acceptance.

Upon the completion of the conduit assembly, the length of steel conduit beyond the bridge abutments will be encased in concrete the full length plus 10 feet and width of the trench from three (3) inches below the bottom of the lowest conduit to seven (7) inches above the top conduit and three (3) inches from the side of the conduit. The above limits will be as modified in the Plans for proper clearance to the abutment and approach pavement. Under no circumstances may the concrete encasement of the duct bank impede or prohibit the proper motion of the bridge deck or the approach pavement. The concrete encasement will follow the applicable provisions for CONCRETE ENCASEMENT as specified elsewhere herein.

The Contractor shall guarantee all work and materials supplied and installed by the Contractor for one year from the completion date of the Contract. All materials installed shall be replaced with new material in the entirety if after one year the materials fail.

This work shall be a Lump Sum that is the total cost of the entire UNDER BRIDGE CONDUIT SYSTEM as required for a complete job. This Lump Sum includes, but not limited to, all labor, tools, generation, transportation, materials, hauling, loading, unloading, placing, installing, removing, disposal of all materials off-site, a one year guarantee coordinating the work, down time to allow for decking work, curing time of concrete, scheduling conflicts, electrical system outages, traffic control, working over the DuPage River, and under energized 12 kv distribution lines.

Basis of Payment: This work will be paid for at the contract price of a lump sum, for UNDER BRIDGE CONDUIT SYSTEM and shall include all labor materials equipment transportation and incidentals required to perform the work

CONDUIT IN TRENCH, TRANSITION

Description: This work will consist of installing concrete encased 6-6" diameter schedule 40 PVC with (steel bends) electric duct bank for a minimum of 55 feet long transition of the type and size specified herein as shown on the Plans at each location and as directed by the Engineer. The work under this item will include, but not be limited to, clearing and grubbing; excavation; furnishing,

backfilling, aligning, supporting cutting, prefitting, grading, and leveling the conduit, positioning the conduit, and placing conduit in a trench bedding; conduit bending; use of a hot box for bends, connecting to steel conduit, installing conduit; top, bottom, and intermediate spacers and concrete encasement and backfilling.

The Contractor will transpose or transition the conduits from the 1 high by 6 wide configurations under the bridge to the 1 high by 6 wide configurations at each location. This work includes moving the conduits from left to right and from up to down using varying spacing requirements The Contractor will use a hot box to form PVC bends or supply and install manufactured steel rigid pipe or bends or schedule 40 PVC.

NOTE: The Contractor will furnish all forms, form materials, spacers, concrete and plastic ties for the transition length. Spacers may be manufactured or made on the job site. All spacers are not to be made of organic materials. All spacers shall be approved prior to installation.

Method of Measurement: This work shall be measured on a per location basis, each, and shall be the total cost of the entire work to perform the transition or transposition of the conduit as required for a complete job. This unit cost of each location includes, but not limited to, all labor, tools, generation, transportation, materials, hauling, loading, unloading, placing, installing, removing, disposal of all materials off-site, a one year guarantee, coordination of all trades, down time to allow for decking work, curing time of concrete, scheduling conflicts, electrical system outages, traffic control, working over the DuPage River, and under energized 12 kv distribution lines.

Basis of Payment: This work will be paid for at the contract price per each, for CONDUIT IN TRENCH, TRANSITION and shall include all labor materials equipment transportation and incidentals required to perform the work for a complete job.

DRILL EXISTING FOUNDATION

Description: This work shall be performed in accordance with Section 879 of the IDOT Standard Specifications except as herein modified. The Contractor shall install and layout the work to install one (1) to two (2) -- 5 inch steel galvanized rigid conduit attached to one to two 5 inch flexible poly coiled or schedule 40 PVC conduit, using prefabricated 5-inch steel bends or 5 inch straight steel straight pieces for entry into an existing reinforced concrete Transformer Vaults by core drilling —5 plus 1 inch diameter holes. The steel ridged galvanized pipe shall be trimmed, cut, aligned, couplings provided, threaded, adapters provided and custom fit into the transformer vault. All straight pieces of steel 5-inch conduit furnished and installed by the contractor are to be supplied in 10 foot lengths and then custom cut and field threaded.

NOTE: The existing Transformer Vault has existing 12Kv cables installed and the cables shall remain energized and is considered a confined space the Contractor shall perform all work and provide and install protection per the N.E.S.C and O.S.H.A regulations. The typical concrete transformer vault is 6 foot deep, 6 foot wide and 6 feet long with a energized transformer on top of the foundation.

An outage to perform this work is determined by the conditions of the City of Naperville's electrical system and may not be available in the required time frame. This condition is normal and is considered incidental to the work. A 72-96 hour notice is required for each and every work

location. Any delay in completing the work due to outage restrictions or lack of an outage is not a reason for additional compensation and will not be considered. In the event the Contractor can arrange for an outage, the Contractor shall perform all work as if the cables are energized.

The transformer vaults are filled with water and debris and need to be pumped out and cleaned. The transformer vault is of a precast concrete design. The transformer vault is not furnished with a sump, but is open to the ground and covered with CA6.

The cables in the transformer vault shall be protected from falling debris. This work requires hand digging around energized 7200 volt phase to ground (12,470 volt phase to phase) primary cables, 600 volt secondary cables and 600 volt service and street light cables and various other utilities. This work includes the installation of sufficient number of various degree steel bends with pieces of 5 inch PVC conduit, couplings, arranging cutting, positioning, fusing and plugging ducts to extend by core drilling through the approximate existing 8 inch thick reinforced concrete wall.

Also included is digging a 6 foot wide by 6 foot long by 7 foot deep opening to provide access to allow equipment to core drill through the existing field installed transformer vault. Includes concrete encasing the 5 inch conduit on the outside the vault for 2 feet, backfilling with CA-6 backfill materials under the conduit and to the bottom of the excavations made plus around the transformer vault to a depth of 6 inches below grade and finish with 6 inches of pulverized black dirt to final grade with sod. In addition, excavating around, under and next to existing 3 inch, 5 inch and 6 inch schedule 40 PVC with bends to the existing facilities is required which includes hand digging TWO (2) trenches, 10 feet long, 4 feet wide, 6 feet deep each to relocate cables in ducts for space to core drill. The conduits and bends entering the structures shall be installed with steel bends into the structures, through the foundation at a distance of 6 inches above the top the bottom of the transformer foundation. Each conduit openings shall be plugged and taped. The end of the 5 inch pipe in side the transformer vault shall have bell fitting attached then plugged and taped. The cored drill hole needs to be oversized to attach the bell fitting. The hole edges on the inside of the transformer vault shall be mudded in with concrete sealed and made smooth and all existing and new debris pumped out or shoveled out and disposed of off site. Dispose of all removed materials off site.

All openings into the existing transformer vault locations must be approved by the City of Naperville before any work is started. Core locations may be adjusted to meet the concerns of the City of Naperville. All transformer locations shall be identified in the field, dimensioned and recorded in the surveyor's field book records after the job is awarded to the Contractor. The Contractor shall provide in and around the area and at the site CA-6 backfill materials, black dirt, sod, grading, landscaping, stone/rock removal, tunneling, hand digging, install new fencing, removal of fencing, provide space for work area, sidewalk replacement, curb and gutter replacement, tree and brush protection, arborist services, and dispose of all removed materials off site. Hand digging is considered part of the work. No claims for extra compensation will be considered for cost incurred because of delay due to a change, due to layout, utility locates, and obtaining access to the structures or obtaining approval for said change.

The Contractor shall schedule this work after normal business hours of the gas station. The Contractor shall provide an 8 hour period to allow for the curing work to be completed. The gas station may be out of service during this time and this time is necessary to do switching. The Contractor shall notify the City and gas station 3 weeks prior to the proposed work.

Method of Measurement: This work will be measured per each foundation location site, regardless of the number of cores necessary at any one individual site.

Basis of Payment: This work shall be paid for at the contract unit price, per each, for DRILL EXISTING FOUNDATION, which shall be payment in full for installing all conduits, bell fittings, seals, cutting, placing and arranging conduits, steel bends, cleaning, pumping, custom fitting, all straight pieces of 5-inch steel ridged galvanized conduit, tunneling, cutting holes in transformers vaults, leveling, concrete, layout work, backfilling, trench work, debris removal and disposal and associated work to install conduit within and into the electrical equipment at the existing locations.

CONNECTING TO EXISTING SWITCHGEAR VAULTS OR FUSE CANS

Description: This work shall consist of installing 1 to 4 6-inch schedule 40 PVC and 1 to 6 3-inch schedule 40 PVC and 1 to 4 5-inch schedule 40 PVC conduit attached to 1 to 4 6-inch and 1 to 6 3-inch and 1 to 4 5-inch flexible poly HDPE coiled conduit, using prefabricated 3-inch, 5-inch and 6-inch steel bends or schedule 40 PVC entering the existing fuse and/or plug cans vaults and switchgear vaults.

This work requires hand digging around energized 7200 volt to ground primary cables, 600 volt secondary cables and 600 volt service and street light cables. This work includes the installation of sufficient number of 3-inch, 5-inch and 6-inch 11, 22, 30, 45, and 90 degree bends with pieces of conduit to extend into the vaults with 4 inches of CA-6 backfill materials under the conduit and around the vault to a depth of 6 inches below grade and finished with 6 inches of black dirt and salt tolerant sod to final grade.

An outage to perform this work is determined by the conditions of the City of Naperville's electrical system and may not be available in the time frame that will meet your needs. This condition is normal and is considered incidental to the work. A 72-96 hour notice is required for each and every work location. Any delay in completing the work due to outage restrictions or lack of an outage is not a reason for additional compensation and will not be considered. The Contractor shall not perform any work without an outage.

In addition, the installation of 3-inch, 5-inch, and 6-inch, schedule 40 PVC, 3-inch, 5-inch and 6-inch steel straight pieces and steel bends to, under and into the switchgear vault, includes hand digging three (3) trenches, 10 feet long, 3 feet wide and 6 feet deep each. The conduits and bends entering the vault shall be steel and installed 6 inches above the bottom of the vault and all conduit openings shall be plugged. This work includes installation of couplings, arranging cutting, positioning, fitting, and plugging ducts to extend into the vaults and/or switch gears with 4-inches of CA-6 backfill materials under the conduit and around the vault to a depth of 6-inches below grade and finish with 6 inches of black dirt to final grade with sod.

The conduits and bends entering the structures shall be installed with steel bends into the structures, from under the structure foundation to 6 inches above the bottom of the structure, 6 inches into the structure, and all conduit openings shall be plugged, vault cleaned out, and ducts plugged and taped. Dispose of all removed materials off site.

All openings into the existing vault locations must be approved by the City of Naperville before any work is started. Vaults may be adjusted to meet the concerns of the adjacent property owners. All vault locations shall be identified in the field, dimensioned and recorded in the surveyor's field book

records after the job is awarded to the Contractor. The Contractor shall provide in and around the area and at the site CA-6 backfill materials, black dirt, sod, grading, landscaping, stone/rock removal, tunneling, hand digging, install new fencing, removal of fencing, provide space for work area, sidewalk replacement, curb and gutter replacement, tree and brush protection, arborist services, and/or replacement and dispose of all removed materials off site. Hand digging is considered part of the work.

No claims for extra compensation will be considered for cost incurred because of delay due to a change, utility locates, obtaining access to the structures or obtaining approval for said change. This work includes: installing all conduits, cutting, placing and arranging conduits, steel bends, pumping, tunneling, cutting holes in vault, leveling, and associated work to install conduit within and into the electrical equipment at the existing locations. All landscaping and restoration included.

Method of Measurement: This work will be measured based on each location where a connection is made. One location may have multiple connections but will be considered as one location.

Basis of Payment: This work shall be paid for at the contract unit price, per each, for CONNECTING TO EXSTING SWITCHGEAR VAULTS OR FUSE CANS.

REMOVE AND REPLACE BITUMINOUS SURFACE, SPECIAL

Description: This work shall be performed in accordance with Section 311, 406 and 440 of the IDOT Standard Specifications except as herein modified. This item shall consists of removing and reinstalling an existing DuPage Trail (Bikepath) and includes saw cutting the existing Bikepath; the removal of the 4- inch existing hot mix asphalt (HMA) pavement full depth, removal of the approximate 9-inch existing aggregate base course, the installation of 4-inch thick HMA surface course, mix C, 9-inch thick Aggregate Base Course, Type B that matches the existing typical section of the existing path in conformance with provisions set forth in these documents, at locations where the proposed improvement crosses or parallels the Bike Path, as detailed in these plans or as directed by the Engineer.

Aggregate Base material shall meet the requirements of Section 351 of the Standard Specifications. The material shall be classified as Type B.

Hot-mix asphalt material used to complete this item of work shall conform to Section 406 of the Standard Specifications. The mix shall be Hot-Mix Asphalt Surface Course, Mix "C", N50.

At locations marked for replacement, (ie trench crossings) the Contractor shall saw cut all edges and all loose and unsound material shall be removed from the area by means of pneumatic, mechanical, or other tools as will be acceptable to the Engineer. The depth of removal shall be the depth of the existing aggregate base, and wearing surface (4-inch asphalt materials) and tack coat as required, and the full length and the width. The width is equal to the trench width damaged area plus 4 feet in both directions from the damaged area. Materials removed form the repair area shall be disposed of by the Contractor off the jobsite, unless otherwise directed by the Engineer. All sawcuts of the Bike Path are at 90 degrees. No skewed saw cuts shall be acceptable, without approval of the City of Naperville.

When electric trenches are installed parallel with the Bike path and also in the Bike Path, the Contractor shall saw cut the ends and all loose and unsound material shall be removed from the area by means of pneumatic, mechanical, or other tools as will be acceptable to the Engineer. The depth of removal shall be the depth of the existing aggregate base (9-inch) and wearing surface (4-inch asphalt materials) and tack coat as required, and the width is the entire 12 feet of width of bike path and length is equal to the trench length. This is the damaged area. The end of the damaged area is to saw cut, made flush, and tied into the existing bike path by overlapping into existing pavement by milling off 2 inches for 5 feet by 12 feet and reinstalling. No patching is allowed.

No portion of the bike path can be partially repaired. Total replacement is required. Materials removed form the repair area shall be disposed of site by the Contractor unless otherwise directed by the Engineer.

Rubber tired equipment is required to work on the top of or cross the Bike Path from the point of view of protecting the surface from being sliced and cut or gauged. The load limit on the Bike path is not designed for HS-20 loading or any impact loads, or any motorized vehicles or motor bikes.

The Contractor travels the Bike Path at the Contractor's risk. The Contractor may take the precaution of installing matting of sufficient strength to support some equipment but design and application, and implementation is at the Contractor's risk.

Any portion of the Bike Path damaged by the Construction activities of the Contractor is the Contractor's responsibility. The Contractor has the responsibility to repair/replace the Bike Path using and one of the procedures shown above or at the Engineer's direction. The City has the final decision on acceptability of the repair/replacement.

During interim periods when the Bike Path is open to traffic but prior to final restoration, the Contractor shall provide a temporary path surface in the work zone using temporary limestone screenings, if applicable, feasible and at the direction of the Engineer. The cost furnishing and installing and maintenance repair of any temporary limestone screening will be paid as TEMPORARY AGGREGATE. The Contractor to maintain the signs, bridges, and temporary path during the duration of the project

Any openings shall be protected with Type I or Type II barricades with lighting for the period beginning immediately after removal is completed until the openings have been filled with bituminous mixture and all debris is cleared away, or with sufficient steel plating to allow traffic to pass.

Prior to placing hot-mix asphalt, all surfaces of the repair area shall be blown free of dust and loose aggregate particles with compressed air. A tack coat conforming to Section 406 of the Standard Specifications shall be applied to all surfaces of the repair area at a rate of 0.10 gallon of residual bitumen per square yard. The opening shall then be filled in lifts of surface course mixture and compacted by means of a self-propelled steel wheel roller to not less than 95 percent of the modified proctor density.

The finished surface of the final patch or installation shall be flush and level to the surrounding pavement surface.

The finished surface shall have all marking restored and match the existing markings in size, color and texture. The finished surface shall have all signage replaced like for like and in the original position, size, lettering and height and verbiage.

The finished surface shall not pond or hold water but shall be installed to be free of standing water. The finished surface shall be flat, level and follow the contours of the existing bike path, free of ripples, waves, gulley, and indentations, free of gaps, humps, ruts, or small pot holes.

Method of Measurement: The method of measurement for this item of work shall be in square feet, which will be calculated by the field-measured length and width of area paved. Measurement shall be considered full compensation for saw cutting, removal and disposal of excavated materials, all survey work to maintain the lines and grades of the Bike Path with calculations, stationing, benchmarks, maintaining the elevations of the bike path, field documentation with detailed sketches, removal and installation of aggregate base materials, removal and installation of all hot-mix asphalt materials, placing of tack coat, disposal of all temporary and waste materials off site, grading, leveling, reestablishing the contours, signage, marking and stripping and any other labor, equipment, temporary work, tools or materials necessary to complete this item to the satisfaction of the Engineer. The Contractor shall provide in the pricing a one year guarantee for the labor and materials and workmanship for the installation of the bike path.

Basis of Payment: This work shall be paid for at the contract unit price per square foot for REMOVE AND REPLACE BITUMINOUS SURFACE, SPECIAL, which shall be full compensation for all materials, labor, tools, equipment and appurtenant necessary for a complete job

CLASS B PATCHES CLASS D PATCHES

Description: This work shall be performed in accordance with Section 442 of the IDOT Standard Specifications except as herein modified.

If the areas designated for patching are found to be composite pavement (hot mix asphalt over Portland Cement Concrete), the patch area shall be constructed to match the existing pavement section, using materials and method as per the appropriate areas of the Standard Specifications. Payment for the patching of composite pavement sections will be by CLASS B PATCHES per square yard of measured area.

All pavement removed and/or not completed before November 15 in pavements that are to remain open to traffic, will be allowed to be temporarily patched for winter service and maintained by the Contractor. All pavement removed and/or not completed may be temporarily patched by using a 6 inch thick high early concrete, a fast setting mix across the entire trench area. The concrete shall be placed evenly and level to the top of the existing pavement. The trench covered with counter sunk steel plates. The plates are counter sunk and left for 3 days. The plates are then removed on the fourth day. The patch is for winter service only and maintained by the Contractor during this period. All temporary patches shall be removed as soon as the asphalt plants are open in the spring and permanent repairs made.

Patches will be paid for only once, of the Class and Type of the final installation. Temporary patches used over winter periods will not be paid for.

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Sawcutting of all patches shall be included in the cost of Class B or Class D Patches.

Any dowel bars and tie bars needed for Class B patches shall be included in the cost of Class B Patches.

ELECTRIC DUCT BANK MATERIALS SUPPLIED BY THE CITY OF NAPERVILLE

Item Description	Part No.	HTE Code	Qty.	Unit
Vault, Switchgear, 74"x76" Fibercrete	284-101-00010	DEVA	4	Each
Conduit 3" Dia Schedule 40 PVC Pipe	285-100-00040	D3C	1080	Feet
Conduit 6" Dia Schedule 40 PVC Pipe	285-100-00070	D6C	9420	Feet
Conduit 5" Dia Schedule 40 PVC Pipe	285-100-00060	D5C	1720	Feet
Elbow 6" Steel 48" Radius, 90°	285-101-00210	D6B90S	4	Each
Elbow 6" Steel 48" Radius, 45°	285-101-00200	D6B45S	14	Each
Elbow 6" Steel 48" Radius, 22°	285-101-00188	D6B22S	24	Each
Elbow 6" Steel 48" Radius, 11º	285-101-00186	D6B11S	24	Each
Elbow 5" Steel 36" Radius, 90°	285-101-00100	D5B90S	12	Each
Elbow 5" Steel 36" Radius, 30°	285-101-00080	D5B30S	2	Each
Elbow 3" Sch. 40 PVC 36" Radius, 90°	285-100-00040	D3B90P	6	Each
Coupling Sleeve 6" PVC Long Line	285-102-00130	D6V	32	Each
Coupling 6" Long Line Schedule 40 PVC	285-102-00140	D6L	32	Each
Coupling 6" Schedule 40 PVC 5°	285-102-00150	D6L5	40	Each
Coupling Sleeve 5" PVC Long Line	285-102-00070	D5V	10	Each
Coupling 5" Long Line Schedule 40 PVC	285-102-00080	D5L	10	Each
Coupling 5" Schedule 40 PVC 5°	285-102-00120	D5L5	20	Each
Coupling Sleeve 3" PVC Long Line	285-102-00030	D3V	8	Each
Coupling 3" Long Line Schedule 40 PVC	285-102-00065	D3L	8	Each
Coupling 3" Schedule 40 PVC 5°	285-102-00040	D3L5	16	Each
Bell Fitting PVC 6" Schedule 40	285-103-00040	D6F	32	Each
Bell Fitting PVC 5" Schedule 40	285-103-00080	D5F	12	Each
Bell Fitting PVC 3" Schedule 40	285-103-00040	D3F	8	Each
Plug, PVC 6" with Pull Tab	285-103-00030	D6P	46	Each
Plug, PVC 5" with Pull Tab	285-103-00070	D5P	10	Each
Plug, PVC 3" with Pull Tab	285-103-00030	D3P	10	Each
Cement PVC Quarts with Brush 24hr Dry	285-199-00090	DMG	5	Each
(Summer)	005 100 00170	D.0D		
Spacer, Base PVC, 6"	285-199-00170	D6R	36	Each
Spacer, Intermediate PVC 6"	285-199-00180	D6R1	100	Each
Detectable Mule Tape, 1250 LB, 3,000' Reel	450-024-00010	DODT	3	Reel
Blow Line, 6,500' In Pails/ 200# Break Strength	450-024-00006	DOM	1	Each
Handhole 4'x8' (Fibercrete)	284-104-00030	DEH8	4	Each
Handhole 4'x6' (Fibercrete)	284-104-00020	DEH6	3	Each
Handhole 3'x5' (Fibercrete)	284-104-00010	DEH5	2	Each
Stud Driving for End Rod	283 156 00050	UGDRS	8	Each
Strap 6" Conduit (Riser)	285 199 00050	DRC6	12	Each
Conduit, Sch 80 PVC 6"	285 100 00075	DRC6	20	Each
Bracket, Pole 3"	285 199 00005	DRC6	6	Each
Chanel, 12"	285 199 00070	DRC6	6	Each
Conduit, Sch 40 PVC 6"	285 100 00070	DRC6	40	Each
Bell Fitting, PVC 6"	285 103 00100	DRC6	2	Each
				

CLEANING AND PAINTING NEW METAL STRUCTURES

Effective Date: September 13, 1994 Revised Date: January 1, 2007

Description. The material and construction requirements that apply to cleaning and painting new structural steel shall be according to the applicable portion of Sections 506 of the Standard Specifications except as modified herein. The three coat paint system shall be the system as specified on the plans and as defined herein.

Materials. All materials to be used on an individual structure shall be produced by the same manufacturer. The Bureau of Materials and Physical Research has established a list of all products that have met preliminary requirements. Each batch of material must be tested and approved by that bureau before use.

The paint materials shall meet the requirements of the following articles of the Standard Specification:

<u>Item</u>	<u>Article</u>
(a) Inorganic Zinc-Rich Primer	1008.02
(b) Waterborne Acrylic	1008.04
(c) Aluminum Epoxy Mastic	1008.03
(d) Organic Zinc-Rich Primer (Note 1)	

- (e) Epoxy Intermediate (Note 1)
- (f) Aliphatic Urethane (Note 1)

Note 1: These material requirements shall be according to the Special Provision for the Organic Zinc-Rich Paint System.

Submittals. At least 30 days prior to beginning field painting, the Contractor shall submit for the Engineer's review and acceptance, the following applicable plans, certifications and information for completing the field work. Field painting can not proceed until the submittals are accepted by the Engineer. Qualifications, certifications and QC plans for shop cleaning and painting shall be available for review by the QA Inspector.

a) Contractor/Personnel Qualifications. Except for miscellaneous steel items such as bearings, side retainers, expansion joint devices, and other items allowed by the Engineer, or unless stated otherwise in the contract, the shop painting Contractors shall be certified to perform the work as follows: the shop painting Contractor shall possess AISC Sophisticated Paint Endorsement or SSPC-QP3 certification. Evidence of current qualifications shall be provided.

Personnel managing the shop and field Quality Control program(s) for this work shall possess a minimum classification as a National Association of Corrosion Engineers (NACE) Coating Inspector Technician, or shall provide evidence of successful inspection of 3 projects of similar or greater complexity and scope that have been completed in the last 2 years. Copies of the certification and/or experience shall be provided.

The personnel performing the QC tests for this work shall be trained in coatings inspection and the use of the testing instruments. Documentation of training shall be provided.

- b) Quality Control (QC) Program. The shop and field QC Programs shall identify the following; the instrumentation that will be used, a schedule of required measurements and observations, procedures for correcting unacceptable work, and procedures for improving surface preparation and painting quality as a result of quality control findings. The field program shall incorporate the IDOT Quality Control Daily Report form, as supplied by the Engineer.
- c) Field Cleaning and Painting Inspection Access Plan. The inspection access plan for use by Contractor QC personnel for ongoing inspections and by the Engineer during Quality Assurance (QA) observations.
- d) Surface Preparation/Painting Plan. The surface preparation/painting plan shall include the methods of surface preparation and type of equipment to be utilized for solvent cleaning, abrasive blast cleaning, washing, and power tool cleaning. The plan shall include the manufacturer's names of the materials that will be used, including Product Data Sheets and Material Safety Data Sheets (MSDS).

A letter or written instructions from the coating manufacturer shall be included, indicating the required drying time for each coat at the minimum, normal, and maximum application temperatures before the coating can be exposed to temperatures or moisture conditions that are outside of the published application parameters.

<u>Field Quality Control (QC) Inspections.</u> The Contractor shall perform first line, in process QC inspections of each phase of the work. The Contractor shall implement the submitted and accepted QC Program to insure that the work accomplished complies with these specifications. The Contractor shall use the IDOT Quality Control Daily Report form supplied by the Engineer to record the results of quality control tests. The completed reports shall be turned into the Engineer before work resumes the following day.

The Contractor shall have available at the shop or on the field site, all of the necessary inspection and testing equipment. The equipment shall be available for the Engineer's use when requested.

<u>Field Quality Assurance (QA) Observations</u>. The Engineer will conduct QA observations of any or all phases of the work. The Engineer's observations in no way relieve the Contractor of the responsibility to provide all necessary daily QC inspections of his/her own and to comply with all requirements of this Specification.

The Engineer has the right to reject any work that was performed without adequate provision for QA observations.

The Engineer will issue a Non-Conformance Report when cleaning and painting work is found to be in violation of the specification requirements, and is not corrected to bring it into compliance before proceeding with the next phase of work.

Inspection Access and Lighting. The Contractor shall facilitate the Engineer's observations as required, including allowing ample time to view the work. The Contractor shall furnish, erect and move scaffolding or other mechanical equipment to permit close observation of all surfaces to be cleaned and painted. This equipment shall be provided during all phases of the work. Examples of acceptable access structures include:

- Mechanical lifting equipment, such as, scissor trucks, hydraulic booms, etc.
- Platforms suspended from the structure comprised of trusses or other stiff supporting members and including rails and kick boards.
- Simple catenary supports are permitted only if independent life lines for attaching a fall arrest system according to Occupational Safety and Health Administration (OSHA) regulations are provided.

When the surface to be inspected is more than 6 ft. (1.8 m) above the ground or water surface, the Contractor shall provide the Engineer with a safety harness and a lifeline according to OSHA regulations. The lifeline and attachment shall not direct the fall into oncoming traffic. The Contractor shall provide a method of attaching the lifeline to the structure independent of the inspection facility or any support of the platform. When the inspection facility is more than 2 1/2 ft. (800 mm) above the ground, the Contractor shall provide an approved means of access onto the platform.

The Contractor shall provide artificial lighting in areas where natural light is inadequate, as determined by the Engineer, to allow proper cleaning, inspection, and painting. Illumination for inspection shall be at least 30 foot candles (325 LUX). Illumination for cleaning and painting, including the working platforms, access, and entryways shall be at least 20 foot candles (215 LUX).

<u>Construction Requirements.</u> The Contractor shall be responsible for any damage caused to persons, vehicles, or property, except as indemnified by the Response Action Contractor Indemnification Act. Whenever the intended purposes of the protective devices are not being accomplished, as determined by the Engineer, work shall be immediately suspended until corrections are made. Painted surfaces damaged by any Contractor's operation shall be removed and repainted, as directed by the Engineer, at the Contractor's expense.

The Contractor shall comply with the provisions of the Illinois Environmental Protection Act. Paint drips, spills, and overspray are not permitted to escape into the air or onto any other surfaces or surrounding property not intended to be painted. Containment shall be used to control paint drips, spills, and overspray, and shall be dropped and all equipment secured when sustained wind speeds of 40 mph (64 kph) or greater occur, unless the containment design necessitates action at lower wind speeds. The contractor shall evaluate project-specific conditions to determine the specific type and extent of containment needed to control the paint emissions and shall submit a plan for containing or controlling paint debris (droplets, spills, overspray, etc.) to the Engineer for approval prior to starting the work. Approval shall not relieve the Contractor of their ultimate responsibility for controlling paint debris from escaping the work zone.

<u>Surface and Weather Conditions</u>. Surfaces to be painted after cleaning shall remain free of moisture and other contaminants. The Contractor shall control his/her operations to insure that dust, dirt, or moisture does not come in contact with surfaces cleaned or painted that day.

The surface temperature shall be at least 5°F (3°C) above the dew point during final surface preparation operations. The paint manufacturers' published literature shall be followed for specific temperature, dew point, and humidity restrictions during the application of each coat.

The Contractor shall monitor temperature, dew point, and humidity every 4 hours during surface preparation and coating application in the specific areas where the work is being performed. The frequency of monitoring shall increase if weather conditions are changing. The Engineer has the right to reject any work that was performed under unfavorable weather conditions. Rejected work shall be removed, recleaned, and repainted at the Contractor's expense.

<u>Seasonal Restrictions on Field Cleaning and Painting.</u> Field cleaning and painting work shall be accomplished between April 15 and October 31 unless authorized otherwise by the Engineer in writing.

Inorganic Zinc-rich/ Waterborne Acrylic Paint system. This system shall be for shop and field application of the coating system, shop application of the intermediate and top coats will not be allowed.

In the shop, all structural steel designated to be painted shall be given one coat of inorganic zinc rich primer. In the field, before the application of the intermediate coat, the prime coat and any newly installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed to remove dirt, oil, lubricants, oxidation products, and foreign substances. Washing shall involve the use of potable water at a pressure between 1000 psi (7 MPa) and 5000 psi (34 MPa) and according to "Low Pressure Water Cleaning" of SSPC-SP12. Paint spray equipment shall not be used to perform the water cleaning. All damaged shop primed areas shall then be spot cleaned per SSPC-SP3 and spot primed with aluminum epoxy mastic. The structural steel shall then receive one full intermediate coat and one full topcoat of waterborne acrylic paint.

- a) Paint drips, spills, and overspray must be controlled. If containment is used to control paint drips, spills, and overspray, the containment shall be dropped and all equipment secured when sustained wind speeds of 40 mph (64 kph) or greater occur. When the protective coverings need to be attached to the structure, they shall be attached by bolting, clamping, or similar means. Welding or drilling into the structure is prohibited unless approved by the Engineer in writing.
- b) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:
 Zinc Primer: 3 mils (75 microns) min., 6 mils (150 microns) max.
 Epoxy Mastic: 5 mils (125 microns) min., 7 mils (180 microns) max.
 Intermediate Coat: 2 mils (50 microns) min., 4 mils (100 microns) max.
 Topcoat: 2 mils (50 microns) min., 4 mils (100 microns) max.

The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 7 and 14 mils (180 and 355 microns).

- c) The pressure washing requirement above may be waived if the QC and QA Inspectors verify the primed surfaces have not been contaminated.
- d) Damage to the paint system shall be spot cleaned using SSPC-SP3. The cleaned areas shall be spot painted with a penetrating sealer as recommended by the manufacturer, which shall overlap onto the existing topcoat. Then the aluminum epoxy mastic shall be spot applied not to go beyond the area painted with the sealer. The acrylic intermediate and topcoat shall be spot applied to the mastic with at least a 6 inch (150 mm) overlap onto the existing topcoat.

Organic Zinc-Rich/ Epoxy/ Urethane Paint System. This system shall be for full shop application of the coating system, all contact surfaces shall be masked off prior to application of the intermediate and top coats.

Additional Surface Preparation. In addition to the requirements of Section 3.2.9 of the AASHTO/AWS D1.5/D1.5:2002 Bridge Welding Code (breaking thermal cut corners of stress carrying members), rolled and thermal cut corners to be painted with organic zinc primer shall be broken if they are sharper than a 1/16 in. (1.5 mm) radius. Corners shall be broken by a single pass of a grinder or other suitable device at a 45 degree angle to each adjoining surface prior to final blast cleaning, so the resulting corner approximates a 1/16 in. (1.5 mm) or larger radius after blasting. Surface anomalies (burrs, fins, deformations) shall also be treated to meet this criteria before priming.

In the shop, all structural steel designated to be painted shall be given one coat of organic zinc rich primer. Before the application of the intermediate coat, the prime coat and any newly installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed to remove dirt, oil, lubricants, oxidation products, and foreign substances. Washing shall involve the use of potable water at a pressure between 1000 psi (7 MPa) and 5000 psi (34 MPa) and according to "Low Pressure Water Cleaning" of SSPC-SP12. Paint spray equipment shall not be used to perform the water cleaning. All damaged shop primed areas shall then be spot cleaned per SSPC-SP3, and the structural steel shall then receive one full intermediate coat of epoxy and one full topcoat of aliphatic urethane.

- (a) Paint drips, spills, and overspray must be controlled. If containment is used to control paint drips, spills, and overspray, the containment shall be dropped and all equipment secured when sustained wind speeds of 40 mph (64 kph) or greater occur. When the protective coverings need to be attached to the structure, they shall be attached by bolting, clamping, or similar means. Welding or drilling into the structure is prohibited unless approved by the Engineer in writing.
- (b) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:
 Organic Zinc-Rich Primer: 3 mils (75 microns) min., 5 mils (125 microns) max.
 Aluminum Epoxy Mastic: 5 mils (125 microns) min., 7 mils (180 microns) max.

Epoxy Intermediate Coat: 3 mils (75 microns) min., 6 mils (150 microns) max. Aliphatic Urethane Top Coat: 2.5 mils (65 microns) min., 4 mils (100 microns) max.

- (c) The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 8.5 and 15 mils (215 and 375 microns).
- (d) When specified on the plans or as requested by the Contractor, and approved by the Engineer, the epoxy intermediate and aliphatic urethane top coats shall be applied in the shop. All faying surfaces of field connections shall be masked off after priming and shall not receive the intermediate or top coats in the shop. The intermediate and top coats for field connections shall be applied, in the field, after erection of the structural steel is completed. The pressure washing requirement above may be waived if the QC and QA Inspectors verify the primed surfaces have not been contaminated.
- (e) Erection and handling damage to the shop applied system shall be spot cleaned using SSPC-SP3. The surrounding coating at each repair location shall be feathered for a minimum distance of 1 1/2 in. (40 mm) to achieve a smooth transition between the prepared areas and the existing coating. The existing coating in the feathered area shall be roughened to insure proper adhesion of the repair coats. The areas cleaned to bare metal shall be spot painted with aluminum epoxy mastic. The intermediate and finish coat shall be spot applied to with at least a 6 inch (150 mm) overlap onto the existing finish coat.

Aluminum Epoxy Mastic/ Waterborne Acrylic Paint system. This system shall be for shop or field application of the entire coating system.

Before priming with aluminum epoxy mastic the steel the surfaces to be primed shall be prepared according to SSPC SP6 for Commercial Blast Cleaning. In the field, before the application of the intermediate coat, the prime coat and any newly installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed to remove dirt, oil, lubricants, oxidation products, and foreign substances. Washing shall involve the use of potable water at a pressure between 1000 psi (7 MPa) and 5000 psi (34 MPa) and according to "Low Pressure Water Cleaning" of SSPC-SP12. Paint spray equipment shall not be used to perform the water cleaning. All damaged shop primed areas shall then be spot cleaned per SSPC-SP3 and spot primed with aluminum epoxy mastic. The structural steel shall then receive one full intermediate coat of aluminum epoxy mastic and one full topcoat of waterborne acrylic paint.

- d) Paint drips, spills, and overspray must be controlled. If containment is used to control paint drips, spills, and overspray, the containment shall be dropped and all equipment secured when sustained wind speeds of 40 mph (64 kph) or greater occur. When the protective coverings need to be attached to the structure, they shall be attached by bolting, clamping, or similar means. Welding or drilling into the structure is prohibited unless approved by the Engineer in writing.
- e) Coating Dry Film Thickness (dft), measured according to SSPC-PA2: Epoxy Mastic Primer: 5 mils (125 microns) min., 7 mils (180 microns) max. Epoxy Mastic Intermediate Coat: 5 mils (125 microns) min., 7 mils (180 microns) max.

Acrylic Topcoat: 2 mils (50 microns) min., 4 mils (100 microns) max.

The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 12 and 18 mils (300 and 460 microns).

- f) The pressure washing requirement above may be waived if the QC and QA Inspectors verify the primed surfaces have not been contaminated.
- d) Damage to the paint system shall be spot cleaned using SSPC-SP3. The cleaned areas shall be spot painted with a penetrating sealer as recommended by the manufacturer, which shall overlap onto the existing topcoat. Then the aluminum epoxy mastic shall be spot applied not to go beyond the area painted with the sealer. The acrylic topcoat shall be spot applied to the mastic with at least a 6 inch (150 mm) overlap onto the existing topcoat.

The paint manufacturer's product data sheets shall be available for QA review in the shop and submitted to the Engineer prior to start of field work and the requirements as outlined in the data sheets shall be followed.

Special Instructions.

Painting Date/System Code. At the completion of the work, the Contractor shall stencil in contrasting color paint the date of painting the bridge, the painting Contractors name, and the paint type code from the Structure Information and Procedure Manual for the system used. The letters shall be capitals, not less than 2 in. (50 mm) and not more than 3 in. (75 mm) in height.

The stencil shall contain the following wording "PAINTED BY (insert the name of the painting Contractor)" and shall show the month and year in which the painting was completed, followed by "CODE S" for the Inorganic Zinc/ Acrylic System, "CODE X" for the Organic Zinc/ Epoxy/ Urethane System, "CODE AB" for the Organic Zinc/ Epoxy/ Urethane System (shop applied), and "CODE U" for the Aluminum Epoxy Mastic/ Acrylic System all stenciled on successive lines. This information shall be stenciled on the cover plate of a truss end post near the top of the railing, or on the outside face of an outside stringer near both ends of the bridge facing traffic, or at some equally visible surface designated by the Engineer.

<u>Method of Measurement.</u> Shop cleaning and painting new structures will not be measured for payment. Field cleaning and painting will not be measured for payment except when performed under a contract that contains a separate pay item for this work.

Basis of Payment. This work will be paid for according to Article 506.07.

SURFACE PREPARATION AND PAINTING REQUIREMENTS FOR WEATHERING STEEL

Effective: November 21, 1997 Revised: February 2, 2007

<u>Description.</u> This work consists of surface preparation of structural steel on bridges built with AASHTO Grade 50W (AASHTO M270M Grade 345W) weathering steel. Also included is the protection and cleaning of the substructure.

<u>Paint systems</u>. When painting of the structural steel or portions thereof is specified on the plans, unless noted otherwise the Contractor shall have the option of using a shop and field applied paint system or a full shop applied system. Cleaning and painting shall be according to the Special Provision for "Cleaning and Painting New Metal Structures" except as modified herein.

- a) Shop and Field Applied Paint System. When the primer is to be shop applied and the intermediate and top coats field applied the Inorganic Zinc Rich/ Acrylic/ Acrylic Paint System shall be used.
- b) Shop Applied Paint System. When the primer, intermediate and top coats are all to be shop applied the Organic Zinc Rich/ Epoxy/ Urethane Paint System shall be used.
- c) The galvanizing requirement of Article 506.04(j) of the Standard Specifications shall not apply to AASHTO M164 (M164M) Type 3 bolts.
- d) All materials for the paint system used shall be supplied by the same paint manufacturer. The color of the finish coat supplied shall match the Federal Color Standard 595a 20045.

Construction Requirements

<u>Surface Preparation.</u> All steel shall be cleaned of any surface contamination according to SSPC-SP1 (Solvent Cleaning) and then given a blast cleaning according to SSPC-SP6 (Commercial Blast Cleaning) except areas to be painted shall be given a blast cleaning according to SSPC-SP10 (Near-White Blast Cleaning).

<u>Water Washing.</u> After blasting and painting, all areas of the steel to remain unpainted shall be sprayed with a stream of potable water to ensure uniform weathering.

<u>Protection and Cleaning of Substructure.</u> The piers and abutments shall be protected during construction to prevent rust staining of the concrete. This can be accomplished by temporarily wrapping the piers and abutments with polyethylene covering. Any rust staining of the piers or abutments shall be cleaned to satisfaction of the Engineer after the bridge deck is complete.

<u>Basis of Payment.</u> Surface preparation of structural steel, protection and cleaning of the substructure and painting of structural steel when specified will be considered as included in the cost for fabrication and erection of structural steel and will not be paid for separately.



UNDERWATER STRUCTURE EXCAVATION PROTECTION

Effective: April 1, 1995 Revised: January 1, 2007

<u>Description</u>. This work shall include all labor, materials, and equipment necessary for the protection of any excavations in water that may be needed for construction at the locations shown on the plans and as required by the Specifications. The protection may consist of diverting the water for the excavation by the uses of timbers, sheet piling, approved granular embankment material or other structural elements adequate to support the excavation and need not be watertight. All concrete placement below the waterline shall be tremied underwater into forms according to Article 503.08 of the Standard Specifications. Tremied concrete shall be placed to an elevation 1 ft. (300 mm) above the water level at the time of construction.

The Contractor's plan for the subject protection must be approved by the Engineer before excavation protection and construction may begin. Any system selected by the Contractor in which safe design and construction requires that loads and stresses be computed and the size and strength of parts determined by mathematical calculations based upon scientific principles and engineering data shall be prepared and sealed by an Illinois Licensed Structural Engineer. When the excavation protection is no longer required, it shall be removed unless otherwise specified by the Engineer. All materials removed will become the property of the Contractor.

<u>Basis of Payment</u>. Excavation protection for structures will be paid for at the contract unit price each, for UNDERWATER STRUCTURE EXCAVATION PROTECTION at the locations specified.

TEMPORARY SOIL RETENTION SYSTEM

Effective: December 30, 2002 Revised: January 1, 2007

<u>Description.</u> This work shall consist of designing, furnishing, installing, adjusting for stage construction when required and subsequent removal of the temporary soil retention system according to the dimensions and details shown on the plans and in the approved design submittal.

<u>General.</u> The temporary soil retention system shall be designed by the Contractor as a minimum, to retain the exposed surface area specified in the plans or as directed by the Engineer.

The design calculations and details for the temporary soil retention system proposed by the Contractor shall be submitted to the Engineer for approval. The calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer. This approval will not relieve the Contractor of responsibility for the safety of the excavation. Approval shall be contingent upon acceptance by all involved utilities and/or railroads.

Construction. The Contractor shall verify locations of all underground utilities before installing any of the soil retention system components or commencing any excavation. Any disturbance or damage to existing structures, utilities or other property, caused by the Contractor's operation, shall be repaired by the Contractor in a manner satisfactory to the Engineer at no additional cost to the Department. The soil retention system shall be installed according to the Contractor's approved design, or as directed by the Engineer, prior to commencing any related excavation. If unable to install the temporary soil retention system as specified in the approved design, the Contractor shall have the adequacy of the design re-evaluated. Any reevaluation shall be submitted to the Engineer for approval prior to commencing the excavation adjacent to the area in question. The Contractor shall not excavate below the maximum excavation line shown in the approved design without the prior permission of the Engineer. The temporary soil retention system shall remain in place until the Engineer determines it is no longer required.

The temporary soil retention system shall be removed and disposed of by the Contractor when directed by the Engineer. When allowed, the Contractor may elect to cut off a portion of the temporary soil retention system leaving the remainder in place. The remaining temporary soil retention system shall be removed to a depth which will not interfere with the new construction, and as a minimum, to a depth of 12 in. (300 mm) below the finished grade, or as directed by the Engineer. Removed system components shall become the property of the Contractor.

When an obstruction is encountered, the Contractor shall notify the Engineer and upon concurrence of the Engineer, the Contractor shall begin working to break up, push aside, or remove the obstruction. An obstruction shall be defined as any object (such as but not limited to, boulders, logs, old foundations etc.) where its presence was not obvious or specifically noted on the plans prior to bidding, that cannot be driven or installed through or around, with normal driving or installation procedures, but requires additional excavation or other procedures to remove or miss the obstruction.

Method of Measurement. The temporary soil retention system furnished and installed according to the Contractor's approved design or as directed by the Engineer will be measured for payment in place, in square feet (square meters). The area measured shall be the vertical exposed surface area envelope of the excavation supported by temporary soil retention system.

Any temporary soil retention system cut off, left in place, or installed beyond those dimensions shown on the contract plans or the approved contractor's design without the written permission of the Engineer, shall not be measured for payment but shall be done at the contractor's own expense.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square foot (square meter) for TEMPORARY SOIL RETENTION SYSTEM.

Payment for any excavation, related solely to the installation and removal of the temporary soil retention system and/or its components, shall not be paid for separately but shall be included in the unit bid price for TEMPORARY SOIL RETENTION SYSTEM. Other excavation, performed in conjunction with this work, will not be included in this item but shall be paid for as specified elsewhere in this contract.

Obstruction mitigation shall be paid for according to Article 109.04 of the Standard Specifications.

POROUS GRANULAR EMBANKMENT (SPECIAL)

Effective: September 28, 2005 Revised: January 1, 2007

<u>Description.</u> This work shall consist of furnishing, and placing porous granular embankment (special) material as detailed on the plans, according to Section 207 except as modified herein.

Materials. The gradation of the porous granular material may be any of the following CA 8 thru CA 18, FA 1 thru FA 4, FA 7 thru FA 9, and FA 20 according to Articles 1003 and 1004.

<u>Construction.</u> The porous granular embankment (special) shall be installed according to Section 207, except that it shall be uncompacted.

Basis of Payment. This work will be paid for at the contract unit price per Cubic Yard (Cubic Meter) for POROUS GRANULAR EMBANKMENT (SPECIAL).

STRUCTURAL REPAIR OF CONCRETE

Effective: January 1, 2007

Description. This work shall consist of structurally repairing concrete.

Materials. Materials shall be according to the following.

Item	Article/Section
(a) Portland Cement Concrete (Note 1)	1020
(b) R1 Mortar (Note2)	
(c) Normal Weight Concrete (Note 3)	
(d) Shotcrete (High Performance) (Note	4)
(e) Reinforcement Bars	1006.10
(f) Anchor Bolts	1006.09
(g) Water	1002
(h) Curing Compound (Type I)	
(i) Cotton Mats	
(j) Protective Coat	
(k) Epoxy (Note 5)	1025
(I) Mechanical Bar Splicers (Note 6)	·

- Note 1. The concrete shall be Class SI, except the cement factor shall be a minimum 6.65 cwt/cu. yd. (395 kg/cu. m), the coarse aggregate shall be a CA 16, and the strength shall be a minimum 4000 psi (27,500 kPa) compressive or 675 psi (4650 kPa) flexural at 14 days. A high range water-reducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump, but the cement factor shall not be reduced. This cement factor restriction shall also apply if a water-reducing admixture is used.
- Note 2. The R1 Mortar shall be from the Department's approved list of Packaged, Dry, Rapid Hardening, Cementitious Materials for Concrete Repairs with coarse aggregate added. The amount of coarse aggregate added to the R1 Mortar shall be per the manufacturer's recommendations. The coarse aggregate gradation shall be CA 16 from an Aggregate Gradation Control System source or a packaged aggregate meeting Article 1004.02 with a maximum size of 1/2 in. (12.5 mm). The R1 Mortar and coarse aggregate mixture shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. A high range water-reducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump.
- Note 3. The packaged concrete mixture shall be from the Department's approved list of Packaged, Dry, Formed, Concrete Repair Mixtures. The materials and preparation of aggregate shall be according to ASTM C 387. Proportioning shall be according to ASTM C 387, except the minimum cement factor shall be 6.65 cwt/cu. yd. (395 kg/cu. m). Cement replacement with fly ash or ground granulated blast-furnace

slag shall be according to Section 1020. The coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). The packaged concrete mixture shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. A high range water-reducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump.

Note 4. A packaged, pre-blended, and dry combination of materials, for the wet-mix shotcrete method shall be provided according to ASTM C 1480. An accelerator is prohibited, except the shotcrete may be modified at the nozzle with a non-chloride accelerator for overhead applications. The shotcrete shall be Type FA, Grade FR, and Class I. The fibers shall be Type III synthetic according to ASTM C 1116.

The 7 and 28 day compressive strength requirements in ASTM C 1480 shall not apply. Instead the shotcrete shall obtain a minimum compressive strength of 4000 psi (27,500 kPa) at 14 days.

The packaged shotcrete shall be limited to the following proportions:

The cement and finely divided minerals shall be 6.05 cwt/cu. yd. (360 kg/cu. m) to 7.50 cwt/cu. yd. (445 kg/cu. m), and the cement shall not be below 4.70 cwt/cu. yd. (279 kg/cu. m).

Class F fly ash is optional and the maximum shall be 15 percent by weight (mass) of cement.

Class C fly ash is optional and the maximum shall be 20 percent by weight (mass) of cement.

Ground granulated blast-furnace slag is optional and the maximum shall be 25 percent by weight (mass) of cement.

Microsilica is required and shall be a minimum of 5 percent by weight (mass) of cement, and a maximum of 10 percent. As an alternative to microsilica, high-reactivity metakaolin may be used at a minimum of 5 percent by weight (mass) of cement, and a maximum of 10 percent.

Fly ash shall not be used in combination with ground granulated blast-furnace slag. Class F fly ash shall not be used in combination with Class C fly ash. Microsilica shall not be used in combination with high-reactivity metakaolin. A finely divided mineral shall not be used in combination with a blended hydraulic cement, except for microsilica or high-reactivity metakaolin.

The water/cement ratio shall be a maximum of 0.42.

The air content as shot shall be 4.0 - 8.0 percent.

- Note 5. In addition ASTM C 881, Type IV, Grade 2 or 3, Class A, B, or C may be used.
- Note 6. Mechanical bar splicers shall be from the approved list of Mechanical Reinforcing Bar Splicers / Coupler Systems, and shall be capable of developing in tension at least 125 percent of the yield strength of the existing reinforcement bar.

Equipment. Equipment shall be according to Article 503.03 and the following.

Chipping Hammer – The chipping hammer for removing concrete shall be a light-duty pneumatic or electric tool with a 15 lb. (7 kg) maximum class or less.

Blast Cleaning Equipment – Blast cleaning equipment for concrete surface preparation shall be the abrasive type, and the equipment shall have oil traps.

Hydrodemolition Equipment – Hydrodemolition equipment for removing concrete shall be calibrated, and shall use water according to Section 1002.

High Performance Shotcrete Equipment – The batching, mixing, pumping, hose, nozzle, and auxiliary equipment shall be for the wet-mix shotcrete method, and shall meet the requirements of ACI 506R.

Construction Requirements

<u>General</u>. The repair methods shall be either formed concrete repair or shotcrete. The repair method shall be selected by the Contractor with the following rules.

- (a) Rule 1. For formed concrete repair, a subsequent patch to repair the placement point after initial concrete placement will not be allowed. As an example, this may occur in a vertical location located at the top of the repair.
- (b) Rule 2. Formed concrete repair shall not be used for overhead applications.
- (c) Rule 3. Shotcrete shall not be used for column repairs greater than 4 in. (100 mm) in depth, or any repair location greater than 8 in. (205 mm) in depth. The only exception to this rule would be for a horizontal application, where the shotcrete may be placed from above in one lift.
- (d) Rule 4. If formed concrete repair is used for locations that have reinforcement with less than 0.75 in. (19 mm) of concrete cover, the concrete mixture shall contain fly ash or ground granulated blast-furnace slag at the maximum cement replacement allowed.

Temporary Shoring or Cribbing. When a temporary shoring or cribbing support system is required, the Contractor shall provide details and computations, prepared and sealed by an Illinois licensed Structural Engineer, to the Department for review and approval. When ever possible the support system shall be installed prior to starting the associated concrete removal. If no system is specified, but during the course of removal the need for temporary shoring or cribbing becomes apparent or is directed by the Engineer due to a structural concern, the Contractor shall not proceed with any further removal work until an appropriate and approved support system is installed.

Concrete Removal. The Contractor shall provide ladders or other appropriate equipment for the Engineer to mark the removal areas. Repair configurations will be kept simple, and squared corners will be preferred. The repair perimeter shall be sawed a depth of 1/2 in. (13 mm) or less, as required to avoid cutting the reinforcement. If the concrete is broken or removed beyond the limits of the initial saw cut, the new repair perimeter shall be recut. The areas to be repaired shall have all loose, unsound concrete removed completely by the use of chipping hammers, hydrodemolition equipment, or other methods approved by the Engineer. The concrete removal shall extend along the reinforcement bar until the reinforcement is free of bond inhibiting corrosion. The outermost layer of reinforcement bar within the repair area shall be undercut to a depth of 3/4 in. (19 mm) or the diameter of the reinforcement bar, whichever value is larger. The underlying transverse reinforcement bar shall also be undercut as previously described, unless the reinforcement is not corroded, and the reinforcement bar is encased and well bonded to the surrounding concrete.

If sound concrete is encountered before existing reinforcement bars are exposed, further removal of concrete shall not be performed unless the minimum repair depth is not met.

The repair depth shall be a minimum of 1 in. (25 mm). The substrate profile shall be \pm 1/16 in. (\pm 1.5 mm). The perimeter of the repair area shall have a vertical face.

If a repair is located at the ground line, any excavation required below the ground line to complete the repair shall be included in this work.

The Contractor shall have a maximum of 14 calendar days to complete each repair location with concrete or shotcrete, once concrete removal has started for the repair.

The Engineer shall be notified of concrete removal that exceeds 6 in. (150 mm) in depth, one fourth the cross section of a structural member, more than half the vertical column reinforcement is exposed in a cross section, more than 6 consecutive reinforcement bars are exposed in any direction, within 1.5 in. (38 mm) of a bearing area, or other structural concern. Excessive deterioration or removal may require further evaluation of the structure or installation of temporary shoring and cribbing support system.

<u>Surface Preparation</u>. Prior to placing the concrete or shotcrete, the Contractor shall prepare the repair area and exposed reinforcement by blast cleaning. The blast cleaning shall provide a surface that is free of oil, dirt, and loose material.

If a succeeding layer of shotcrete is to be applied, the initial shotcrete surface and remaining exposed reinforcement shall be free of curing compound, oil, dirt, loose material, rebound (i.e. shotcrete material leaner than the original mixture which ricochets off the receiving surface), and overspray. Preparation may be by lightly brushing or blast cleaning if the previous shotcrete surface is less than 36 hours old. If more than 36 hours old, the surface shall be prepared by blast cleaning.

The repair area and perimeter vertical face shall have a rough surface. Care shall be taken to ensure the perimeter sawcut is roughened. Just prior to concrete or shotcrete placement, saturate the repair area with water to a saturated surface-dry condition. Any standing water shall be removed.

Concrete or shotcrete placement shall be done within 3 calendar days of the surface preparation or the repair area shall be prepared again.

<u>Reinforcement.</u> Exposed reinforcement bars shall be cleaned of concrete and corrosion by blast cleaning. After cleaning, all exposed reinforcement shall be carefully evaluated to determine if replacement or additional reinforcement bars are required.

Reinforcing bars that have been cut or have lost 25 percent or more of their original cross sectional area shall be supplemented by new in kind reinforcement bars. New bars shall be lapped a minimum of 32 bar diameters to existing bars. A mechanical bar splicer shall be used when it is not feasible to provide the minimum bar lap. No welding of bars shall be performed.

Intersecting reinforcement bars shall be tightly secured to each other using 0.006 in. (1.6 mm) or heavier gauge tie wire, and shall be adequately supported to minimize vibration during concrete placement or application of shotcrete.

For reinforcement bar locations with less than 0.75 in. (19 mm) of cover, protective coat shall be applied to the completed repair. The application of the protective coat shall be according to Article 503.19, 2nd paragraph, except blast cleaning shall be performed to remove curing compound.

The Contractor shall anchor the new concrete to the existing concrete with 3/4 in. (19 mm) diameter hook bolts for all repair areas where the depth of concrete removal is greater than 8 in. (205 mm) and there is no existing reinforcement extending into the repair area. The hook bolts shall be spaced at 15 in. (380 mm) maximum centers both vertically and horizontally, and shall be a minimum of 12 in. (305 mm) away from the perimeter of the repair. The hook bolts shall be installed according to Section 584.

Repair Methods. All repair areas shall be inspected and approved by the Engineer prior to placement of the concrete or application of the shotcrete.

(a) Formed Concrete Repair. Falsework shall be according to Article 503.05. Forms shall be according to Article 503.06. Formwork shall provide a smooth and uniform concrete finish, and shall approximately match the existing concrete structure. Formwork shall be

mortar tight and closely fitted where they adjoin the existing concrete surface to prevent leakage. Air vents may be provided to reduce voids and improve surface appearance. The Contractor may use exterior mechanical vibration, as approved by the Engineer, to release air pockets that may be entrapped.

The concrete for formed concrete repair shall be a Class SI Concrete, or a packaged R1 Mortar with coarse aggregate added, or a package Normal Weight Concrete at the Contractor's option. The concrete shall be placed and consolidated according to Article 503.07. The concrete shall not be placed when frost is present on the surface of the repair area, or the surface temperature of the repair area is less than 40 °F (4 °C). All repaired members shall be restored as close as practicable to their original dimensions.

Curing shall be done according to Article 1020.13.

If temperatures below 45°F (7°C) are forecast during the curing period, protection methods shall be used. Protection Method I according to Article 1020.13(d)(1), or Protection Method II according to Article 1020.13(d)(2) shall be used during the curing period.

The surfaces of the completed repair shall be finished according to Article 503.15.

(b) Shotcrete. Shotcrete shall be tested by the Engineer for air content according to Illinois Modified AASHTO T 152. Obtain the sample in a damp, non-absorbent container from the discharge end of the nozzle.

For compressive strength of shotcrete, a $18 \times 18 \times 3.5$ in. $(457 \times 457 \times 89 \text{ mm})$ test panel shall be shot by the Contractor for testing by the Engineer. A steel form test panel shall have a minimum thickness of 3/16 in. (5 mm) for the bottom and sides. A wood form test panel shall have a minimum 3/4 in. (19 mm) thick bottom, and a minimum 1.5 in. (38 mm) thickness for the sides. The test panel shall be cured according to Article 1020.13 (a) (3) or (5) while stored at the jobsite and during delivery to the laboratory. After delivery to the laboratory for testing, curing and testing shall be according to ASTM C 1140.

The method of alignment control (i.e. ground wires, guide strips, depth gages, depth probes, and formwork) to ensure the specified shotcrete thickness and reinforcing bar cover is obtained shall be according to ACI 506R. Ground wires shall be removed after completion of cutting operations. Guide strips and formwork shall be of dimensions and a configuration that do not prevent proper application of shotcrete. Metal depth gauges shall be cut 1/4 in. (6 mm) below the finished surface. All repaired members shall be restored as close as practicable to their original dimensions.

The shotcrete shall not be applied when the air temperature is below 45°F (7°C) and falling or below 40°F (4°C). Shotcrete shall not be applied when the air temperature is greater than 90°F (32°C). The applied shotcrete shall have a minimum temperature of 50°F (10°C) and a maximum temperature of 90°F (32°C). The shotcrete shall not be

applied during periods of rain unless protective covers or enclosures are installed. The shotcrete shall not be applied when frost is present on the surface of the repair area, or the surface temperature of the repair area is less than 40°F (4°C). If necessary, lighting shall be provided to provide a clear view of the shooting area.

The shotcrete shall be applied according to ACI 506R, and shall be done in a manner that does not result in cold joints, laminations, sandy areas, voids, sags, or separations. In addition, the shotcrete shall be applied in a manner that results in maximum densification of the shotcrete. Shotcrete which is identified as being unacceptable while still plastic shall be removed and re-applied.

The nozzle shall normally be at a distance of 2 to 5 ft. (0.6 to 1.5 m) from the receiving surface, and shall be oriented at right angles to the receiving surface. Exceptions to this requirement will be permitted to fill corners, encase large diameter reinforcing bars, or as approved by the Engineer. For any exception, the nozzle shall never be oriented more than 45 degrees from the surface. Care shall be taken to keep the front face of the reinforcement bar clean during shooting operations. Shotcrete shall be built up from behind the reinforcement bar. Accumulations of rebound and overspray shall be continuously removed prior to application of new shotcrete. Rebound material shall not be incorporated in the work.

Whenever possible, shotcrete shall be applied to the full thickness in a single layer. The maximum thickness shall be 4 in. (100 mm) unless the shotcrete is applied from above on a horizontal surface, or a thicker application is approved by the Engineer. When two or more layers are required, the minimum number shall be used and shall be done in a manner without sagging or separation. A flash coat (i.e. a thin layer of up to 1/4 in. (6 mm) applied shotcrete) may be used as the final lift for overhead applications.

Prior to application of a succeeding layer of shotcrete, the initial layer of shotcrete shall be prepared according to the surface preparation and reinforcement bar cleaning requirements. Upon completion of the surface preparation and reinforcement bar treatment, water shall be applied according to the surface preparation requirements unless the surface is moist. The second layer of shotcrete shall then be applied within 30 minutes.

Shotcrete shall be cut back to line and grade using trowels, cutting rods, screeds or other suitable devices. The shotcrete shall be allowed to stiffen sufficiently before cutting. Cutting shall not cause cracks or delaminations in the shotcrete. For depressions, cut material may be used for small areas. Rebound material shall not be incorporated in the work. For the final finish, a wood float shall be used to approximately match the existing concrete texture. All repaired members shall be restored as close as practicable to their original dimensions.

Cotton mats shall be applied, according to Article 1020.13(a)(5), to the exposed layer of shotcrete within 10 minutes after finishing, and wet curing shall begin immediately. As an

alternative, Type I curing compound shall be applied within 10 minutes and moist curing with cotton mats shall begin within 3 hours.

When a shotcrete layer is to be covered by a succeeding shotcrete layer within 36 hours, the repair area shall be protected with intermittent hand fogging, or wet curing with either burlap or cotton mats shall begin within 10 minutes. Intermittent hand fogging may be used only for the first hour. Thereafter, wet curing with burlap or cotton mats shall be used until the succeeding shotcrete layer is applied. Intermittent hand fogging may be extended to the first hour and a half if the succeeding shotcrete layer is applied by the end of this time.

The curing period shall be for 7 days, except when there is a succeeding layer of shotcrete. In this instance, the initial shotcrete layer shall be cured until the surface preparation and reinforcement bar treatment is started.

If temperatures below 45°F (7°C) are forecast during the curing period, protection methods shall be used. Protection Method I according to Article 1020.13(d)(1), or Protection Method II according to Article 1020.13(d)(2) shall be used during the curing period

<u>Inspection of Completed Work.</u> The Contractor shall provide ladders or other appropriate equipment for the Engineer to inspect the repaired areas. After curing but no sooner than 28 days after placement of concrete or shooting of shotcrete, the repair shall be examined for conformance with original dimensions, cracks, voids, and delaminations. Sounding for delaminations will be done with a hammer or by other methods determined by the Engineer.

The repaired area shall be removed and replaced, as determined by the Engineer, for nonconformance with original dimensions, surface cracks greater than 0.01 in. (0.25 mm) in width, map cracking with a crack spacing in any direction of 18 in. (0.45 m) or less, voids, or delaminations.

If a nonconforming repair is allowed to remain in place, cracks 0.01 in. (0.25 mm) or less shall be repaired with epoxy according to Section 590. For cracks less than 0.007 in. (2 mm), the epoxy may be applied to the surface of the crack. Voids shall be repaired according to Article 503.15.

<u>Publications and Personnel Requirements</u>. The Contractor shall provide a current copy of ACI 506R to the Engineer a minimum of one week prior to start of construction.

The shotcrete crew foreman shall have current American Concrete Institute (ACI) nozzlemen certification for vertical wet and overhead wet applications. A copy of the certificate shall be given to the Engineer.

<u>Method of Measurement</u>. This work will be measured for payment in place and the area computed in square feet (square meters). For a repair at a corner, both sides will be measured.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square foot (square meter) for STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 IN. (125 MM), STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN. (125 MM).

When there is no pay item for temporary shoring or cribbing, the work to design, install, and remove the temporary shoring and cribbing will be paid for according to Article 109.04.

The furnishing and installation of supplemental reinforcement bars, mechanical bar splicers, hook bolts, and protective coat will be paid according to Article 109.04.

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

SPECIAL PROVISION FOR COOPERATION WITH UTILITIES

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

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

Replace Article 105.07 of the Standard Specifications with the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

SPECIAL PROVISION FOR INSURANCE

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

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

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

ity of Naperville	
aperville Park District	
orest Preserve District of DuPage County	
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The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

ASBESTOS BEARING PAD REMOVAL (BDE)

Effective: November 1, 2003

<u>Description</u>. This work shall consist of the removal and disposal of existing asbestos bearing pads.

The Contractor is advised that the existing bearing pads contain asbestos. All necessary precautions shall be taken in removing, handling, transporting and disposing of the bearing pads. Work shall be in conformance with all governing laws, codes, ordinances or other regulations except that, by agreement with IEPA, it shall not be necessary to notify IEPA or to have a person trained in the asbestos requirements on-site for removal and disposal of asbestos bearing pads.

<u>Documentation</u>. The Engineer will keep records of the removal, handling, transportation and disposal site.

CONSTRUCTION REQUIREMENTS

General. Prior to removal, the asbestos bearing pads shall be thoroughly wetted.

During handling and transportation, the pads shall be covered with an approved wetting material or contained in such a way as to prevent dust or debris from entering the atmosphere.

The asbestos bearing pads shall be hauled to an approved landfill disposal site.

Basis of Payment. This work will be paid for at the contract unit price per each for ASBESTOS BEARING PAD REMOVAL.

CEMENT (BDE)

Effective: January 1, 2007

Revise Section 1001 of the Standard Specifications to read:

"SECTION 1001. CEMENT

1001.01 Cement Types. Cement shall be according to the following.

(a) Portland Cement. Acceptance of portland cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland cement shall be according to ASTM C 150, and shall meet the standard physical and chemical requirements. Type I or Type II may be used for cast-in-place, precast, and precast prestressed concrete. Type III may be used according to Article 1020.04, or when approved by the Engineer. All other cements referenced in ASTM C 150 may be used when approved by the Engineer.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement and the total of all inorganic processing additions shall be a maximum of 4.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids that improve the flowability of cement, reduce pack set, and improve grinding efficiency. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302 and Class C fly ash according to the chemical requirements of AASHTO M 295.

(b) Portland-Pozzolan Cement. Acceptance of portland-pozzolan cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland-pozzolan cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type IP or I(PM) may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. The pozzolan constituent for Type IP shall be a maximum of 21 percent of the weight (mass) of the portland-pozzolan cement. All other cements referenced in ASTM C 595 may be used when approved by the Engineer.

For cast-in-place construction, portland-pozzolan cements shall only be used from April 1 to October 15.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall not be used.

(c) Portland Blast-Furnace Slag Cement. Acceptance of portland blast-furnace slag cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland blast-furnace slag cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type I(SM) slag-modified portland cement may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. All other cements referenced in ASTM C 595 may be used when approved by the Engineer.

For cast-in-place construction, portland blast-furnace slag cements shall only be used from April 1 to October 15.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall not be used.

- (d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department's current "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs", and shall be according to the following.
 - (1) The cement shall have a maximum final set of 25 minutes, according to Illinois Modified ASTM C 191.
 - (2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified ASTM C 109.
 - (3) The cement shall have a maximum drying shrinkage of 0.050 percent at seven days, according to Illinois Modified ASTM C 596.
 - (4) The cement shall have a maximum expansion of 0.020 percent at 14 days, according to Illinois Modified ASTM C 1038.
 - (5) The cement shall have a minimum 80 percent relative dynamic modulus of elasticity; and shall not have a weight (mass) gain in excess of 0.15 percent or a weight (mass) loss in excess of 1.0 percent, after 100 cycles, according to Illinois Modified AASHTO T 161, Procedure B. At 100 cycles, the specimens are measured and weighed at 73 °F (23 °C).
- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used when specified by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to ASTM C 150, except the time of setting shall not apply. The

chemical requirements shall be determined according to ASTM C 114 and shall be as follows: minimum 38 percent aluminum oxide (Al₂O₃), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide (MgO), maximum 0.4 percent sulfur trioxide (SO₃), maximum 1 percent loss on ignition, and maximum 3.5 percent insoluble residue.

- 1001.02 Uniformity of Color. Cement contained in single loads or in shipments of several loads to the same project shall not have visible differences in color.
- 1001.03 Mixing Brands and Types. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall not be mixed or used alternately in the same item of construction unless approved by the Engineer.
- 1001.04 Storage. Cement shall be stored and protected against damage, such as dampness which may cause partial set or hardened lumps. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall be kept separate."

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: January 1, 2007

<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 DBE Directory or most recent addendum.

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 firms 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. This determination is based on an assessment of the type of work, the location of the work, and the availability of

- (a) The bidder documents that firmly committed 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 may consult the DBE Directory as a reference source for DBE companies certified by the Department. 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 web site at www.dot.il.gov.

<u>BIDDING PROCEDURES</u>. Compliance with the bidding procedures of this Special Provision is required prior to the award of the contract and the failure of the as-read low bidder to comply will render the bid not responsive.

(a) In order to assure the timely award of the contract, the as-read low bidder shall submit a Disadvantaged Business Utilization Plan on Department form SBE 2026 within seven working days after the date of letting. To meet the seven day requirement, the bidder may send the Plan by certified mail or delivery service within the seven working day period. If a question arises concerning the mailing date of a Plan, the mailing date will be established by the U.S. Postal Service postmark on the original certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure that the postmark or receipt date is affixed within the seven working days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Plan is to be submitted 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). It is the responsibility of the bidder to obtain confirmation of telefax delivery. The Department will not accept a Utilization Plan if it does not meet the seven day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the

project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.

- (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. The signatures on these forms must be original signatures. All elements of information indicated on the said form shall be provided, including but not limited to the following:
 - (1) The name and address of each DBE to be used;
 - (2) A description, including pay item numbers, of the commercially useful work to be done by each DBE;
 - (3) The price to be paid to each DBE for the identified work specifically stating 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) A commitment statement signed by the bidder and each DBE evidencing availability and intent to perform commercially useful work on the project; and
 - (5) If the bidder is a joint venture comprised of DBE firms and non-DBE firms, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (d) The contract will not be awarded until the Utilization Plan submitted by the bidder is approved. The Utilization Plan will be approved by the Department if the Plan commits sufficient commercially useful DBE work performance to meet the contract goal. The Utilization Plan will not be approved by the Department if the Plan does not commit sufficient DBE performance to meet the contract goal unless the bidder documents that it made a good faith effort to meet the goal. The good faith procedures of Section VIII of this special provision apply. If the Utilization Plan is not approved because it is deficient in a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no less than a five working day period in order to cure the deficiency.

<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 firm 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 firm 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 contact. Credit will be given for the full value of all such DBE trucks operated using DBE employed drivers. Goal credit will be limited to the value of the reasonable fee or commission received by the DBE if trucks are leased from a non-DBE company.
- (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 or 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.

GOOD FAITH EFFORT PROCEDURES. If the bidder cannot obtain sufficient DBE commitments to meet the contract goal, the bidder must document in the Utilization Plan the good faith efforts made in the attempt 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 could reasonably be expected to obtain sufficient DBE participation. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts are not good faith efforts; rather, the bidder is expected to have taken those 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 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 a good faith effort has not been made, the Department will notify the bidder of that preliminary determination by contacting the responsible company official designated in the Utilization Plan. The preliminary determination shall include a statement of reasons why good faith efforts have not been found, and may include additional good faith efforts that the bidder could take. The notification will designate a five working day period during which the bidder shall take additional efforts. The bidder is not limited by a statement of additional efforts, but may take other action beyond any stated additional efforts in order to obtain additional DBE commitments. The bidder shall submit an amended Utilization Plan if additional DBE commitments to meet the contract goal are secured. If additional DBE commitments sufficient to meet the contract goal are not secured, the bidder shall report the final good faith efforts made in the time allotted. All additional efforts taken by the bidder will be considered as part of the bidder's good faith efforts. If the bidder is not able to meet the goal after taking additional efforts, the Department will make a pre-final determination of the good faith efforts of the bidder and will notify the designated responsible company official of the reasons for an adverse determination.
- (c) The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five working days after 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 pre-final determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. In addition, the request shall be considered a consent by the bidder to extend the time for award. 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 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 reconsideration, 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.

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 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.

- (a) 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) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. If a DBE listed in the Utilization Plan is terminated for reasons other than convenience, or fails to complete its work on the contract for any reason, the Contractor shall make good faith efforts to

find another DBE to substitute for the terminated DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, but only to the extent needed to meet the contract goal or the amended contract goal. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.

- (c) 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 therefor 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 Report on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the Report 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 DBE companies indicated in the Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (d) 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.
- (e) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may 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.

EQUIPMENT RENTAL RATES (BDE)

Effective: August 2, 2007

Replace the second and third paragraphs of Article 105.07(b)(4)a. of the Standard Specifications with the following:

"Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4)."

Replace Article 109.04(b)(4) of the Standard Specifications with the following:

- "(4) Equipment. Equipment used for extra work shall be authorized by the Engineer. The equipment shall be specifically described, be of suitable size and capacity for the work to be performed, and be in good operating condition. For such equipment, the Contractor will be paid as follows.
 - a. Contractor Owned Equipment. Contractor owned equipment will be paid for by the hour using the applicable rate from the "Equipment Watch Rental Rate Blue Book" (Blue Book). The applicable hourly rate is defined as the FHWA hourly rate, from the time period the force account work begins, adjusted for both the model year of the equipment and the Illinois region. The time allowed will be the actual time the equipment is operating on the extra work. For the time required to move the equipment to and from the site of the extra work and any authorized idle (standby) time, payment will be made according to: 0.5 x (AHR EOC).

Where: AHR = Applicable Hourly Rate (defined above)

EOC = Estimated Operating Costs per hour (from the Blue Book)

All time allowed shall fall within the working hours authorized for the extra work.

The rates above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals. The rates do not include labor.

The Contractor shall submit to the Engineer sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper equipment category. If a rate is not established in the Blue Book for a particular piece of equipment, the Engineer will establish a rate for that piece of equipment that is consistent with its cost and use in the industry.

b. Rented Equipment. Whenever it is necessary for the Contractor to rent equipment to perform extra work, the rental and transportation costs of the

equipment plus five percent for overhead will be paid. In no case shall the rental rates exceed those of established distributors or equipment rental agencies.

All prices shall be agreed to in writing before the equipment is used."

EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2007

Revise Article 105.03(a) of the Standard Specifications to read:

"(a) Erosion and Sediment Control Deficiency Deduction. When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, he/she will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 1 week based on the urgency of the situation and the nature of the deficiency. The Engineer will be the sole judge.

A deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the National Pollutant Discharge Elimination System (NPDES) Storm Water Permit for Construction Site Activities. A deficiency may also be applied to situations where corrective action is not an option such as the failure to participate in a jobsite inspection of the project, failure to install required measures prior to initiating earth moving operations, disregard of concrete washout requirements, or other disregard of the NPDES permit.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The daily monetary deduction will be either \$1000.00 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day."

ERRATA FOR THE 2007 STANDARD SPECIFICATIONS (BDE)

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

- Page 60 Article 109.07(a). In the second line of the first paragraph change "amount" to "quantity".
- Page 154 Article 312.05. In the second line of the fifth paragraph change "180 °C" to "175 °C".
- Page 207 Article 406.14. In the second line of the second paragraph change "MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS, of the mixture composition specified;" to "MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS;".
- Page 237 Article 420.18. In the second line of the first paragraph change "October 15" to "November 1".
- Page 345 Article 505.08(I). In the third line of the first paragraph change "1/8 mm" to "1/8 in.".
- Page 345 Article 505.08(I). In the nineteenth line of the first paragraph change "is" to "in".
- Page 379 Article 512.15. In the first and sixth lines of the third paragraph change "50 percent" to "ten percent".
- Page 383 Article 516.04(b)(1). In the fifth line of the first paragraph change "drillingpouring" to "pouring".
- Page 390 Article 520.02(h). Change "1027.021" to "1027.01".
- Page 398 Article 540.07(b). Add the following two paragraphs after the third paragraph:

"Excavation in rock will be measured for payment according to Article 502.12.

Removal and disposal of unstable and/or unsuitable material below plan bedding grade will be measured for payment according to Article 202.07."

Page 398 Article 540.08. Add the following two paragraphs after the fifth paragraph:

"Excavation in rock will be paid for according to Article 502.13.

Removal and disposal of unstable and/or unsuitable material below plan bedding grade will be paid for according to Article 202.08."

- Page 435 Article 542.04(b). Delete the last sentence of the last paragraph.
- Page 465 Article 551.06. In the second line of the first paragraph change "or" to "and/or".

- Page 585 Article 701.19(a). Add "701400" to the second line of the first paragraph.
- Page 586 Article 701.19(c). Delete "701400" from the second line of the first paragraph.
- Page 586 Article 701.19. Add the following subparagraph to this Article:
 - "(f) Removal of existing pavement markings and raised reflective pavement markers will be measured for payment according to Article 783.05."
- Page 587 Article 701.20(b). Delete "TRAFFIC CONTROL AND PROTECTION STANDARD 701400;" from the first paragraph.
- Page 588 Article 701.20. Add the following subparagraph to this Article.
 - "(j) Removal of existing pavement markings and raised reflective pavement markers will be paid for according to Article 783.06."
- Page 639 Article 805.04. In the first line of the second paragraph change "changes" to "charges".
- Page 762 Article 1020.04. In Table 1 Classes of Portland Cement Concrete and Mix Design Criteria, add to the minimum cement factor for Class PC Concrete "5.65 (TY III)", and add to the maximum cement factor for Class PC Concrete "7.05 (TY III)".
- Page 765 Article 1020.04. In Table 1 Classes of Portland Cement Concrete and Mix Design Criteria (metric), add to the minimum cement factor for Class PC Concrete "335 (TY III)", and add to the maximum cement factor for Class PC Concrete "418 (TY III)".
- Page 800 Article 1030.05(a)(12). Revise "Dust Collection Factor" to "Dust Correction Factor".
- Page 800 Article 1030.05(a)(14). Revise the first occurrence of Article 1030.05(a)(14) to Article 1030.05(a)(13).
- Page 800 Article 1030.05(a). Add to the list of QC/QA documents "(16) Calibration of Equipment for Asphalt Content Determination".
- Page 809 Article 1030.05. Revise the subparagraph "(a) Quality Assurance by the Engineer." to read "(e) Quality Assurance by the Engineer.".
- Page 889 Article 1069.02(a)(2). In the third line of the first paragraph add "stainless steel" in front of "screws".
- Page 889 Article 1069.02(b). Delete the third paragraph.
- Page 890 Article 1069.02(c). Delete subparagraph (c).

Page 946 Article 1080.03(a)(1). In the third line of the first paragraph revise "(300 μ m)" to "(600 μ m)".

Page 963 Article 1083.02(b). In the second line of the first paragraph revise "ASTM D 4894" to "ASTM D 4895".

Page 1076 In the Index of Pay Items delete the pay item "BITUMINOUS SURFACE REMOVAL – BUTT JOINT".

HOT-MIX ASPHALT EQUIPMENT, SPREADING AND FINISHING MACHINE (BDE)

Effective: January 1, 2005 Revised: January 1, 2007

Revise the fourth paragraph of Article 1102.03 of the Standard Specifications to read:

"The paver shall be equipped with a receiving hopper having sufficient capacity for a uniform spreading operation. The hopper shall be equipped with a distribution system to uniformly place a non-segregated mixture in front of the screed. The distribution system shall have chain curtains, deflector plates, and /or other devices designed and built by the paver manufacturer to prevent segregation during distribution of the mixture from the hopper to the paver screed. The Contractor shall submit a written certification that the devices recommended by the paver manufacturer to prevent segregation have been installed and are operational. Prior to paving, the Contractor, in the presence of the Engineer, shall visually inspect paver parts specifically identified by the manufacturer for excessive wear and the need for replacement. The Contractor shall supply a completed check list to the Engineer noting the condition of the parts. Worn parts shall be replaced. The Engineer may require an additional inspection prior to placement of the surface course or at other times throughout the work."

IMPACT ATTENUATORS (BDE)

Effective: November 1, 2003 Revised: January 1, 2007

<u>Description</u>. This work shall consist of furnishing and installing impact attenuators of the category and test level specified.

<u>Materials</u>. Materials shall meet the requirements of the impact attenuator manufacturer and the following:

Item	Article/Section
(a) Fine Aggregate (Note 1)	1003.01
(b) Steel Posts, Structural Shapes, and Plates	1006.04
(c) Rail Elements, End Section Plates, and Splice Plates	1006.25
(d) Bolts, Nuts, Washers and Hardware	1006.25
(e) Hollow Structural Tubing	
(f) Wood Posts and Wood Blockouts	
(g) Preservative Treatment	
(0)	

Note 1. Fine aggregate shall be FA 1 or FA 2, Class A quality. The sand shall be unbagged and shall have a maximum moisture content of five percent.

CONSTRUCTION REQUIREMENTS

<u>General</u>. Impact attenuators shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 350 for the test level specified and shall be on the Department's approved list. Fully redirective and partially redirective attenuators shall also be designed for bi-directional impacts.

<u>Installation</u>. Regrading of slopes or approaches for the installation shall be as shown on the plans.

Attenuator bases, when required by the manufacturer, shall be constructed on a prepared subgrade according to the manufacturer's specifications. The surface of the base shall be slightly sloped or crowned to facilitate drainage. For sand modules, the perimeter of each module and the specified weight (mass) of sand in each module shall be painted on the surface of the base.

Impact attenuators shall be installed according to the manufacturer's specifications and include all necessary transitions between the impact attenuator and the item to which it is attached.

<u>Method of Measurement</u>. This work will be measured for payment as each, where each is defined as one complete installation.

Basis of Payment. This work, will be paid for at the contract unit price per each for IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW); IMPACT ATTENUATORS (FULLY REDIRECTIVE, WIDE); IMPACT ATTENUATORS (FULLY REDIRECTIVE, RESETTABLE); IMPACT ATTENUATORS (SEVERE USE, NARROW); IMPACT ATTENUATORS (SEVERE USE, WIDE); IMPACT ATTENUATORS (PARTIALLY REDIRECTIVE); or IMPACT ATTENUATORS (NON-REDIRECTIVE), of the test level specified.

Regrading of slopes or approaches will be paid for according to Section 202 and/or Section 204 of the Standard Specifications.

IMPACT ATTENUATORS, TEMPORARY (BDE)

Effective: November 1, 2003 Revised: January 1, 2007

<u>Description</u>. This work shall consist of furnishing, installing, maintaining, and removing temporary impact attenuators of the category and test level specified.

<u>Materials</u>. Materials shall meet the requirements of the impact attenuator manufacturer and the following:

Article/Section
1003.01
1006.04
1006.25
1006.25
1006.27(b)
1007.01, 1007.02, 1007.06
1007.12
1018.01

Note 1. Fine aggregate shall be FA 1 or FA 2, Class A quality. The sand shall be unbagged and shall have a maximum moisture content of five percent.

CONSTRUCTION REQUIREMENTS

<u>General</u>. Impact Attenuators shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 350 for the test level specified and shall be on the Department's approved list.

<u>Installation</u>. Regrading of slopes or approaches for the installation shall be as shown on the plans.

Attenuator bases, when required by the manufacturer, shall be constructed on a prepared subgrade according to the manufacturer's specifications. The surface of the base shall be slightly sloped or crowned to facilitate drainage.

Impact attenuators shall be installed according to the manufacturer's specifications and include all necessary transitions between the impact attenuator and the item to which it is attached.

When water filled attenuators are used between November 1 and April 15, they shall contain anti-freeze according to the manufacturer's recommendations.

Markings. Sand module impact attenuators shall be striped with alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes. There shall be at least two of each stripe on each module.

Other types of impact attenuators shall have a terminal marker applied to their nose and reflectors along their sides.

<u>Maintenance</u>. All maintenance of the impact attenuators shall be the responsibility of the Contractor until removal is directed by the Engineer.

<u>Relocate</u>. When relocation of temporary impact attenuators is specified, they shall be removed, relocated and reinstalled at the new location. The reinstallation requirements shall be the same as those for a new installation.

Removal. When the Engineer determines the temporary impact attenuators are no longer required, the installation shall be dismantled with all hardware becoming the property of the Contractor.

Surplus material shall be disposed of according to Article 202.03. Anti-freeze, when present, shall be disposed of/recycled according to local ordinances.

When impact attenuators have been anchored to the pavement, the anchor holes shall be repaired with rapid set mortar. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.

<u>Method of Measurement</u>. This work will be measured for payment as each, where each is defined as one complete installation.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per each for IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW); IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, WIDE); IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, RESETTABLE); IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW); IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, WIDE); or IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) of the test level specified.

Relocation of the devices will be paid for at the contract unit price per each for IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE); IMPACT ATTENUATORS, RELOCATE (SEVERE USE); or IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE); of the test level specified.

Regrading of slopes or approaches will be paid for according to Section 202 and/or Section 204 of the Standard Specifications.

LEGAL REQUIREMENTS TO BE OBSERVED (BDE)

Effective: August 1, 2007

Revise Article 107.01 of the Standard Specifications to read:

"107.01 Legal Requirements to be Observed. The Contractor warrants that it is, and that it shall keep fully informed of all legal requirements found in Federal, State, and local laws, ordinances, rules and regulations, and all orders, decrees, notices of violation or enforcement actions issued by any judicial or administrative body, board, agency, or tribunal having any jurisdiction or authority, that in any manner affect those engaged or employed to perform the work of the contract, or that affect the performance and conduct of the work of the contract. Unless otherwise provided in the contract, the Contractor shall obtain and keep current all permits and licenses, and give all notices required for the performance of the work of the contract that may be required by all such laws, ordinances, rules, regulations, orders, decrees, notices, and actions. The Contractor shall observe and obey all such laws, ordinances, rules. regulations, orders, decrees, notices, and actions; and shall indemnify and save harmless the State, the Department and all of its officers, agents, employees, and servants against any claim, liability, fine, or monetary assessment arising from the breach of this article or the violation of any such law, ordinance, rule, regulation, order, decree, notice or action, whether by the Contractor, a subcontractor, a supplier of material or service, others engaged by the Contractor, or the employees of any of them. Except as expressly mandated by law or regulation, or otherwise provided in the contract, the Department shall not be responsible for monitoring the Contractor's compliance with any law, ordinance, rule, regulation, order, decree, notice, or action. However, on noticing any violation of a legal requirement, the Department will notify the Contractor and the agency responsible for enforcement. The Department will cooperate with other agencies in their efforts to enforce legal requirements and may assist any such agency's effort to obtain Contractor compliance. The Contractor shall comply fully with any and all requests made by the Department within the time specified. The obligations of the Contractor under this article shall not be released or diminished by the issuance of any notice of violation or enforcement action to or in the name of the Department."

MULTILANE PAVEMENT PATCHING (BDE)

Effective: November 1, 2002

Pavement broken and holes opened for patching shall be completed prior to weekend or holiday periods. Should delays of any type or for any reason prevent the completion of the work, temporary patches shall be constructed. Material able to support the average daily traffic and meeting the approval of the Engineer shall be used for the temporary patches. The cost of furnishing, placing, maintaining, removing and disposing of the temporary work, including traffic control, shall be the responsibility of the Contractor.

NOTIFICATION OF REDUCED WIDTH (BDE)

Effective: April 1, 2007

Add the following after the first paragraph of Article 701.06 of the Standard Specifications:

"Where the clear width through a work zone with temporary concrete barrier will be 16.0 ft (4.88 m) or less, the Contractor shall notify the Engineer at least 21 days in advance of implementing the traffic control for that restriction."

PAYMENTS TO SUBCONTRACTORS (BDE)

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

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause; and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section

7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

PLASTIC BLOCKOUTS FOR GUARDRAIL (BDE)

Effective: November 1, 2004 Revised: January 1, 2007

Add the following to Article 630.02 of the Standard Specifications:

"(g) Plastic Blockouts (Note 1.)

Note 1. Plastic blockouts may be used in lieu of wood blockouts for steel plate beam guardrail. The plastic blockouts shall be the minimum dimensions shown on the plans and shall be on the Department's approved list."

PORTLAND CEMENT CONCRETE PLANTS (BDE)

Effective: January 1, 2007

. Add the following to Article 1020.11(a) of the Standard Specifications.

- "(9) Use of Multiple Plants in the Same Construction Item. The Contractor may simultaneously use central-mixed, truck-mixed, and shrink-mixed concrete from more than one plant, for the same construction item, on the same day, and in the same pour. However, the following criteria shall be met.
 - a. Each plant shall use the same cement, finely divided minerals, aggregates, admixtures, and fibers.
 - b. Each plant shall use the same mix design. However, material proportions may be altered slightly in the field to meet slump and air content criteria. Field-water adjustments shall not result in a difference that exceeds 0.02 between plants for water/cement ratio. The required cement factor for central-mixed concrete shall be increased to match truck-mixed or shrink-mixed concrete, if the latter two types of mixed concrete are used in the same pour.
 - c. The maximum slump difference between deliveries of concrete shall be 3/4 in. (19 mm) when tested at the jobsite. If the difference is exceeded, but test results are within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and shall test subsequent deliveries of concrete until the slump difference is corrected. For each day, the first three truck loads of delivered concrete from each plant shall be tested for slump by the Contractor. Thereafter, when a specified test frequency for slump is to be performed, it shall be conducted for each plant at the same time.
 - d. The maximum air content difference between deliveries of concrete shall be 1.5 percent when tested at the jobsite. If the difference is exceeded, but test results are within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and shall test subsequent deliveries of concrete until the air content difference is corrected. For each day, the first three truck loads of delivered concrete from each plant shall be tested for air content by the Contractor. Thereafter, when a specified test frequency for air content is to be performed, it shall be conducted for each plant at the same time.
 - e. Strength tests shall be performed and taken at the jobsite for each plant. When a specified strength test is to be performed, it shall be conducted for each plant at the same time. The difference between plants for their mean strength shall not exceed 450 psi (3100 kPa) compressive and 80 psi (550 kPa) flexural. The strength standard deviation for each plant shall not exceed 650 psi (4480 kPa) compressive and 110 psi (760 kPa) flexural. The mean and standard deviation requirements shall apply to the test of record. If the strength difference requirements are exceeded, the Contractor shall take corrective action.

f. The maximum haul time difference between deliveries of concrete shall be 15 minutes. If the difference is exceeded, but haul time is within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and check subsequent deliveries of concrete until the haul time difference is corrected."

RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

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

In Article 1030.02(g), delete the last sentence of the first paragraph in (Note 2).

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT

1031.01 Description. Reclaimed asphalt pavement (RAP) is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.

1031.02 Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District to provide verification of the quality of the RAP to clarify appropriate stockpile.

- (a) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (b) Conglomerate 5/8. Conglomerate 5/8 RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High 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 5/8 RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate 5/8 RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (c) Conglomerate 3/8. Conglomerate 3/8 RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High 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 B quality. This RAP may have an

inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate 3/8 RAP shall be processed prior to testing by crushing to where all RAP shall pass the 3/8 in. (9.5 mm) or smaller screen. Conglomerate 3/8 RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.

- (d) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, Superpave (High or Low ESAL), HMA (High or Low ESAL), or equivalent mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (e) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

1031.03 Testing. When used in HMA, the RAP shall be sampled and tested either during or after 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).

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 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 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.

(a) Testing Conglomerate 3/8. In addition to the requirements above, conglomerate 3/8 RAP shall be tested for maximum theoretical specific gravity (G_{mm}) at a 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).

(b) Evaluation of Test-Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G_{mm} . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	Homogeneous / Conglomerate	Conglomerate "D" Quality		
1 in. (25 mm)		± 5 %		
1/2 in. (12.5 mm)	. ±8%	± 15 %		
No. 4 (4.75 mm)	±6%	± 13 %		
No. 8 (2.36 mm)	± 5 %			
No. 16 (1.18 mm)		± 15 %		
No. 30 (600 μm)	±5%			
No. 200 (75 μm)	± 2.0 %	± 4.0 %		
Asphalt Binder	± 0.4 % ^{1/}	± 0.5 %		
G _{mm}	± 0.02 ^{2/}			

- 1/ The tolerance for conglomerate 3/8 shall be \pm 0.3 %.
- 2/ Applies only to conglomerate 3/8. When variation of the G_{mm} exceeds the \pm 0.02 tolerance, a new conglomerate 3/8 stockpile shall be created which will also require an additional mix design.

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt binder content test results fall outside the appropriate tolerances, the RAP shall not be used in HMA unless the RAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

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

1031.04 Quality Designation of Aggregate in RAP. The quality of the RAP shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

- (a) RAP from Class I, Superpave (High ESAL), or HMA (High ESAL) surface mixtures are designated as containing Class B quality coarse aggregate.
- (b) RAP from Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder and IL-9.5L surface mixtures are designated as Class D quality coarse aggregate.
- (c) RAP from Class I, Superpave (High ESAL), or HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.

(d) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

1031.05 Use of RAP in HMA. The use of RAP in HMA shall be as follows.

- (a) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (b) Steel Slag Stockpiles. RAP 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) surface mixtures only.
- (c) Use in HMA Surface Mixtures (High and Low ESAL). RAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be either homogeneous or conglomerate 3/8, in which the coarse aggregate is Class B quality or better.
- (d) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be homogeneous, conglomerate 5/8, or conglomerate 3/8, in which the coarse aggregate is Class C quality or better.
- (e) Use in Shoulders and Subbase. RAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be homogeneous, conglomerate 5/8, conglomerate 3/8, or conglomerate DQ.
- (f) The use of RAP shall be a contractor's option when constructing HMA in all contracts. When the contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in the table for a given N Design.

Max RAP Percentage

HMA MIXTURES 1/, 3/	MAXIMUM % RAP				
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified		
30	30	30	10		
50	25	15	10		
70	15 / 25 ^{2/}	10 / 15 ^{2/}	10		
90	10	. 10	10		
105	10	10	10		

- 1/ For HMA Shoulder and Stabilized Sub-Base (HMA) N-30, the amount of RAP shall not exceed 50% of the mixture.
- 2/ Value of Max % RAP if 3/8 RAP is utilized.

3/ When RAP exceeds 20%, the high & low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25% RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

1031.06 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP material meeting the above detailed requirements.

RAP designs shall be submitted for volumetric verification. If additional RAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP stockpiles may be used in the original mix design at the percent previously verified.

1031.07 HMA Production. The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

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

If the RAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP and either switch to the virgin aggregate design or submit a new RAP design. When producing mixtures containing conglomerate 3/8 RAP, a positive dust control system shall be utilized.

HMA plants utilizing RAP shall be capable of automatically recording and printing the following information.

- (a) Dryer Drum Plants.
 - (1) Date, month, year, and time to the nearest minute for each print.
 - (2) HMA mix number assigned by the Department.
 - (3) Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - (4) Accumulated dry weight of RAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - (5) Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.

- (6) Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- (7) Residual asphalt binder in the RAP material as a percent of the total mix to the nearest 0.1 percent.
- (8) Aggregate and RAP moisture compensators in percent as set on the control panel. (Requied when accumulated or individual aggregate and RAP are printed in wet condition.)
- (b) Batch Plants.
 - (1) Date, month, year, and time to the nearest minute for each print.
 - (2) HMA mix number assigned by the Department.
 - (3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - (4) Mineral filler weight to the nearest pound (kilogram).
 - (5) RAP weight to the nearest pound (kilogram).
 - (6) Virgin asphalt binder weight to the nearest pound (kilogram).
 - (7) Residual asphalt binder in the RAP 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.

- **1031.08** RAP in Aggregate Surface Course and Aggregate Shoulders. The use of RAP 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 "Other". The testing requirements of Article 1031.03 shall not apply.
 - (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)

Effective: April 1, 2007

Revise the seventh paragraph of Article 1106.02 of the Standard Specifications to read:

"At the time of manufacturing, the retroreflective prismatic sheeting used on channelizing devices shall meet or exceed the initial minimum coefficient of retroreflection as specified in the following table. Measurements shall be conducted according to ASTM E 810, without averaging. Sheeting used on cones, drums and flexible delineators shall be reboundable as tested according to ASTM D 4956. Prestriped sheeting for rigid substrates on barricades shall be white and orange.

Initial Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material						
Observation Entrance Angle Fluorescer						
Angle (deg.)	(deg.)	White	Orange	Orange		
0.2	-4	365	160	150		
0.2	+30	175	80	70		
0.5	-4	245	100	95		
0.5	+30	100	50	40"		

Revise the first sentence of the first paragraph of Article 1106.02(c) of the Standard Specifications to read:

"Barricades and vertical panels shall have alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

Revise the third sentence of the first paragraph of Article 1106.02(d) of the Standard Specifications to read:

"The bottom panels shall be 8 x 24 in. (200 x 600 mm) with alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

REINFORCEMENT BARS (BDE)

Effective: November 1, 2005 Revised: January 1, 2007

Revise Article 1006.10(a) of the Standard Specifications to read:

- "(a) Reinforcement Bars. Reinforcement bars will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reinforcement Bar and Dowel Bar Plant Certification Procedure". The Department will maintain an approved list of producers.
 - (1) Reinforcement Bars (Non-Coated). Reinforcement bars shall be according to ASTM A 706 (A 706M), Grade 60 (420) for deformed bars and the following.
 - a. Chemical Composition. The chemical composition of the bars shall be according to the following table.

	CHEMICAL COMPOS	SITION
Element 1/	Heat Analysis (% maximum)	Product Analysis (% maximum)
Carbon	0.30	0.33
Manganese	1.50	1.56
Phosphorus	0.035	0.045
Sulfur	0.045	0.055
Silicon	0.50	0.55
Nickel	2/	2/
Chromium	2/	2/
Molybdenum	2/	2/
Copper	2/	2/
Titanium	2/	2/
Vanadium	2/	2/
Columbium	2/	2/
Aluminum	2/, 3/	2/, 3/
Tin 4/	0.040	0.044

- Note 1/. The bars shall not contain any traces of radioactive elements.
- Note 2/. There is no composition limit but the element must be reported.
- Note 3/. If aluminum is not an intentional addition to the steel for deoxidation or killing purposes, residual aluminum content need not be reported.

Note 4/. If producer bar testing indicates an elongation of 15 percent or more and passing of the bend test, the tin composition requirement may be waived.

- b. Heat Numbers. Bundles or bars at the construction site shall be marked or tagged with heat identification numbers of the bar producer.
- c. Guided Bend Test. Bars may be subject to a guided bend test across two pins which are free to rotate, where the bending force shall be centrally applied with a fixed or rotating pin of a certain diameter as specified in Table 3 of ASTM A 706 (A 706M). The dimensions and clearances of this guided bend test shall be according to ASTM E 190.
- d. Spiral Reinforcment. Spiral reinforcement shall be deformed or plain bars conforming to the above requirements or cold-drawn steel wire conforming to AASHTO M 32.
- (2) Epoxy Coated Reinforcement Bars. Epoxy coated reinforcement bars shall be according to Article 1006.10(a)(1) and shall be epoxy coated according to AASHTO M 284 (M 284M) and the following.
 - a. Certification. The epoxy coating applicator shall be certified under the Concrete Reinforcing Steel Institute's (CRSI) Epoxy Plant Certification Program.
 - b. Coating Thickness. The thickness of the epoxy coating shall be 7 to 12 mils (0.18 to 0.30 mm). When spiral reinforcment is coated after fabrication, the thickness of the epoxy coating shall be 7 to 20 mils (0.18 to 0.50 mm).
 - c. Cutting Reinforcement. Reinforcement bars may be sheared or sawn to length after coating, providing the end damage to the coating does not extend more than 0.5 in. (13 mm) back and the cut is patched before any visible rusting appears. Flame cutting will not be permitted."

SEEDING (BDE)

Effective: July 1, 2004 Revised: August 1, 2007

Revise the following seeding mixtures shown in Table 1 of Article 250.07 of the Standard Specifications to read:

	"Table 1 - SEEDING MIXTURES					
	Class – Type	Seeds	lb/acre (kg/hectare)			
2	Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	100 (110)			
		Perennial Ryegrass	50 (55)			
		Creeping Red Fescue Red Top	40 (50) 10 (10)			
2A	Salt Tolerant Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	60 (70)			
		Perennial Ryegrass	20 (20)			
		Red Fescue (Audubon, Sea Link, or Epic)	30 (20)			
		Hard Fescue (Rescue 911, Spartan II, or Reliant IV)	30 (20)			
		Fults Salt Grass 1/	60 (70)"			

Revise Table II of Article 1081.04(c)(6) of the Standard Specifications to read:

		TAI	BLE II			
Variety of Seeds	Hard Seed % Max.	Purity % Min.	Pure Live Seed % Min.	Weed % Max.	Secondary * Noxious Weeds No. per oz (kg) Max. Permitted	Notes
Alfalfa	20	92	89	0.50	6 (211)	1/
Clover, Alsike	15	92	87	0.30	6 (211)	2/
Red Fescue, Audubon	0	97	82	0.10	3 (105)	-
Red Fescue, Creeping	-	97	82	1.00	6 (211)	-
Red Fescue, Epic	-	98	83	0.05	1 (35)	-
Red Fescue, Sea Link	-	98	83	0.10	3 (105)	-
Tall Fescue, Blade Runner	· -	98	83	0.10	2 (70)	-
Tall Fescue, Falcon IV	-	98	83	0.05	1 (35)	-
Tall Fescue, Inferno	0	98	83	0.10	2 (70)	-
Tall Fescue, Tarheel II	-	97	82	1.00	6 (211)	-
Tall Fescue, Quest	0 .	98	83	0.10	2 (70)	
Fults Salt Grass	0	98	85	0.10	2 (70)	-
Kentucky Bluegrass	-	97	80	0.30	7 (247)	4/
Oats	-	92	88	0.50	2 (70)	3/
Redtop	_	90	78	1.80	5 (175)	3/

		TA	BLE II			
	Hard Seed	Purity	Pure Live	Weed	Secondary * Noxious Weeds	
Variety of Seeds	% Max.	% Min.	Seed % Min.	% Max.	No. per oz (kg) Max. Permitted	Notes
Ryegrass, Perennial, Annual	-	97	85	0.30	5 (175)	3/
Rye, Grain, Winter	-	92	83	0.50	2 (70)	3/
Hard Fescue, Reliant IV	-	98	83	0.05	1 (35)	-
Hard Fescue, Rescue 911	0	97	82	0.10	3 (105)	-
Hard Fescue, Spartan II	-	98	83	0.10	3 (105)	-
Timothy	-	92	84	0.50	5 (175)	3/
Wheat, hard Red Winter	-	92	89	0.50	2 (70)	3/"

Revise the first sentence of the first paragraph of Article 1081.04(c)(7) of the Standard Specifications to read:

"The seed quantities indicated per acre (hectare) for Prairie Grass Seed in Classes 3, 3A, 4, 4A, 6, and 6A in Article 250.07 shall be the amounts of pure, live seed per acre (hectare) for each species listed."

SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)

Effective: November 1, 2005 Revised: January 1, 2007

<u>Definition</u>. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

<u>Usage</u>. Self-consolidating concrete may be used for cast-in-place concrete construction items involving Class MS, DS, and SI concrete.

Materials. Materials shall be according to Section 1021 of the Standard Specifications.

Mix Design Criteria. Article 1020.04 of the Standard Specifications shall apply, except as follows:

- (a) The cement factor shall be according to Article 1020.04 of the Standard Specifications. If the maximum cement factor is not specified, it shall not exceed 7.05 cwt/cu yd (418 kg/cu m). The cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used.
- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements shall not apply.
- (d) The coarse aggregate gradations shall be CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 may be used when the Contractor provides satisfactory evidence to the Engineer that the mix will not segregate. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (e) The slump flow range shall be ± 2 in. (± 50 mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

<u>Test Methods</u>. Illinois Test Procedures SCC-1, SCC-2, SCC-3, SCC-4, SCC-5, SCC-6, and Illinois Modified AASHTO T 22, 23, 121, 126, 141, 152, 177, 196, and 309 shall be used for testing of self-consolidating concrete mixtures.

Mix Design Submittal. The Contractor's Level III PCC Technician shall submit a mix design according to the "Portland Cement Concrete Level III Technician" course manual, except target slump information is not applicable and will not be required. However, a slump flow target range shall be submitted. In addition, the design mortar factor may exceed 1.10 and durability test data will be waived.

A J-ring value shall be submitted if a lower mix design maximum will apply. An L-box blocking ratio shall be submitted if a higher mix design minimum will apply. The Contractor shall also indicate applicable construction items for the mix design.

Trial mixture information will be required by the Engineer. A trial mixture is a batch of concrete tested by the Contractor to verify the Contractor's mix design will meet specification requirements. Trial mixture information shall include test results as specified in the "Portland Cement Concrete Level III Technician" course manual. Test results shall also include slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index. For the trial mixture, the slump flow shall be near the midpoint of the proposed slump flow target range.

<u>Trial Batch</u>. A minimum 2 cu yd (1.5 cu m) trial batch shall be produced, and the self-consolidating concrete admixture dosage proposed by the Contractor shall be used. The slump flow shall be within 1.0 in. (25 mm) of the maximum slump flow range specified by the Contractor, and the air content shall be within the top half of the allowable specification range.

The trial batch shall be scheduled a minimum of 21 calendar days prior to anticipated use and shall be performed in the presence of the Engineer.

The Contractor shall provide the labor, equipment, and materials to test the concrete. The mixture will be evaluated by the Engineer for strength, air content, slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index.

Upon review of the test data from the trial batch, the Engineer will verify or deny the use of the mix design and notify the Contractor. Verification by the Engineer will include the Contractor's target slump flow range. If applicable, the Engineer will verify the Contractor's maximum J-ring value and minimum L-box blocking ratio.

A new trial batch will be required whenever there is a change in the source of any component material, proportions beyond normal field adjustments, dosage of the self-consolidating concrete admixture, batch sequence, mixing speed, mixing time, or as determined by the Engineer. The testing criteria for the new trial batch will be determined by the Engineer.

When necessary, the trial batches shall be disposed of according to Article 202.03 of the Standard Specifications.

Mixing Portland Cement Concrete. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

<u>Falsework and Forms</u>. In addition to Articles 503.05 and 503.06 of the Standard Specifications, the Contractor shall consider the fluid nature of the concrete for designing the falsework and forms. Forms shall be tight to prevent leakage of fluid concrete.

<u>Placing and Consolidating</u>. Concrete placement and consolidation shall be according to Article 503.07 of the Standard Specifications, except as follows:

Revise the third paragraph of Article 503.07 of the Standard Specifications to read:

"Open troughs and chutes shall extend as nearly as practicable to the point of deposit. The drop distance of concrete shall not exceed 5 ft (1.5 m). If necessary, a tremie shall be used to meet this requirement. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer. For drilled shafts, free fall placement will not be permitted."

Delete the seventh, eighth, ninth, and tenth paragraphs of Article 503.07 of the Standard Specifications.

Add to the end of the eleventh paragraph of Article 503.07 of the Standard Specifications the following:

"Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer."

Quality Control by Contractor at Plant. The specified test frequencies for aggregate gradation, aggregate moisture, air content, unit weight/yield, and temperature shall be performed as indicated in the contract plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed as needed to control production. The column segregation index test and hardened visual stability index test will not be required to be performed at the plant.

Quality Control by Contractor at Jobsite. The specified test frequencies for air content, strength, and temperature shall be performed as indicated in the contract plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed on the first two truck deliveries of the day, and every 50 cu yd (40 cu m) thereafter. The Contractor shall select either the J-ring or L-box test for jobsite testing.

The column segregation index test will not be required to be performed at the jobsite. The hardened visual stability index test shall be performed on the first truck delivery of the day, and every 300 cu yd (230 cu m) thereafter. Slump flow, visual stability index, J-ring value or L-box blocking ratio, air content, and concrete temperature shall be recorded for each hardened visual stability index test.

The Contractor shall retain all hardened visual stability index cut cylinder specimens until the Engineer notifies the Contractor that the specimens may be discarded.

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

Quality Assurance by Engineer at Plant. For air content and aggregate gradation, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract plans.

For slump flow, visual stability index, and J-ring or L-box tests, quality assurance independent sample testing and split sample testing will be performed as determined by the Engineer.

Quality Assurance by Engineer at Jobsite. For air content and strength, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract plans.

For slump flow, visual stability index, J-ring or L-box, and hardened visual stability index tests, quality assurance independent sample testing will be performed as determined by the Engineer.

For slump flow and visual stability index quality assurance split sample testing, the Engineer will perform tests at the beginning of the project on the first three tests performed by the Contractor. Thereafter, a minimum of ten percent of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design. The acceptable limit of precision will be 1.5 in. (40 mm) for slump flow and a limit of precision will not apply to the visual stability index.

For the J-ring or the L-box quality assurance split sample testing, a minimum of 80 percent of the total tests required of the Contractor will be witnessed by the Engineer per plant, which will

include a minimum of one witnessed test per mix design. The Engineer reserves the right to conduct quality assurance split sample testing. The acceptable limit of precision will be 1.5 in. (40 mm) for the J-ring value and ten percent for the L-box blocking ratio.

For each hardened visual stability index test performed by the Contractor, the cut cylinders shall be presented to the Engineer for determination of the rating. The Engineer reserves the right to conduct quality assurance split sample testing. A limit of precision will not apply to the hardened visual stability index.

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

Effective: April 2, 2004 Revised: April 1, 2007

<u>Description</u>. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of steel cost adjustments.

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

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

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

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

- (a) Evidence that increased or decreased steel costs have been passed on to the Contractor.
- (b) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (c) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

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

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

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

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

 $D = CBP_M - CBP_L$

Where: $CBP_M =$ The average of the Consumer Buying Price indices for Shredded Auto Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the American Metal Market (AMM) for the day the steel is shipped from the mill. The indices will be converted from dollars per ton to dollars per lb (kg).

CBP_L = The average of the Consumer Buying Price indices for Shredded Auto Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the AMM for the day the contract is let. The indices will be converted from dollars per ton to dollars per lb (kg).

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

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

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

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

Percent Difference = $\{(CBP_L - CBP_M) \div CBP_L\} \times 100$

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

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

Attachment

Attachment	
ltem	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	:
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights
Glindral at oteci	(masses)
Reinforcing Steel	See plans for weights
Kelling dieei	(masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Mesh Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 – 16.5 m)	21 lb/ft (31 kg/m)
Light Pole w/Mast Arm, 30 - 50 ft (9 - 15.2 m)	13 lb/ft (19 kg/m)
Light Pole w/Mast Arm, 55 - 60 ft (16.5 – 18 m)	19 lb/ft (28 kg/m)
l ight Tower w/Luminaire Mount, 80 - 110 ft (24 – 33.5 m)	31 lb/ft (46 kg/m)
l ight Tower w/Luminaire Mount, 120 - 140 ft (36.5 – 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	0.50 % (44.5 %)
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

Return With Bid

ILLINOIS DEPARTMENT OF TRANSPORTATION

OPTION FOR STEEL COST ADJUSTMENT

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of steel cost adjustments. After award, this form, when submitted shall become part of the contract.

Contract No.:		•	·	
Company Name:			<u> </u>	·
Contractor's Option	<u>ı</u> :			
Is your company opt	ing to include th	nis spe	cial provision as pa	art of the contract plans?
Yes		No	Ü	
Signature:	·			Date:
80127			,	

STEEL PLATE BEAM GUARDRAIL (BDE)

Effective: November 1, 2005 Revised: August 1, 2007

Revise the first paragraph of Article 1006.25 of the Standard Specifications to read:

"1006.25 Steel Plate Beam Guardrail. Steel plate beam guardrail, including bolts, nuts, and washers, shall be according to AASHTO M 180. The guardrail shall be Class A, with a Type II galvanized coating; except the weight (mass) of the coating for each side of the guardrail shall be at least 2.00 oz/sq ft (610 g/sq m). The coating will be determined for each side of the guardrail using the average of at least three non-destructive test readings taken on that side of the guardrail. The minimum average thickness for each side shall be 3.4 mils (86 μ m)."

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

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

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002 Revised: August 1, 2007

Revise the third paragraph of Article 280.03 of the Standard Specifications to read:

"Erosion control systems shall be installed prior to beginning any activities which will potentially create erodible conditions. Erosion control systems for areas outside the limits of construction such as storage sites, plant sites, waste sites, haul roads, and Contractor furnished borrow sites shall be installed prior to beginning soil disturbing activities at each area. These offsite systems shall be designed by the Contractor and be subject to the approval of the Engineer."

Add the following paragraph after the third paragraph of Article 280.03 of the Standard Specifications:

"The temporary erosion and sediment control systems shown on the plans represent the minimum systems anticipated for the project. Conditions created by the Contractor's operations, or for the Contractor's convenience, which are not covered by the plans, shall be protected as directed by the Engineer at no additional cost to the Department. Revisions or modifications of the erosion and sediment control systems shall have the Engineer's written approval."

Revise the second sentence of the first paragraph of Article 280.04(a) of the Standard Specifications to read:

"Temporary ditch checks shall be constructed with rolled excelsior, products from the Department's approved list, or with aggregate when specified."

Add the following paragraph after the ninth paragraph of Article 280.07 of the Standard Specifications:

"Temporary or permanent erosion control systems required for areas outside the limits of construction will not be measured for payment."

Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications.

Revise Article 1081.15(f) of the Standard Specifications to read:

"(f) Rolled Excelsior. Rolled excelsior shall consist of an excelsior fiber filling totally encased inside netting and sealed with metal clips or knotted at the ends. Each roll shall be a minimum of 20 in. (500 mm) in diameter and a minimum of 10 ft (3 m) in length. Each 10 ft (3 m) roll shall have a minimum weight (mass) of 30 lbs (13.6 kg). The excelsior fiber filling shall be weed free. At least 80 percent of the fibers shall be a minimum of 6 in. (150 mm) in length. The fiber density shall be a minimum of 1.38 lb/cu ft (22 kg/cu m). The netting shall be composed of a polyester or

polypropylene material which retains 70 percent of its strength after 500 hours of exposure to sunlight. The maximum opening of the net shall be 1×1 in. (25 x 25 mm)."

THERMOPLASTIC PAVEMENT MARKINGS (BDE)

Effective: January 1, 2007

Revise Article 1095.01(a)(2) of the Standard Specifications to read:

"(2) Pigment. The pigment used for the white thermoplastic compound shall be a high-grade pure (minimum 93 percent) titanium dioxide (TiO₂). The white pigment content shall be a minimum of ten percent by weight and shall be uniformly distributed throughout the thermoplastic compound.

The pigments used for the yellow thermoplastic compound shall not contain any hazardous materials listed in the Environmental Protection Agency Code of Federal Regulations (CFR) 40, Section 261.24, Table 1. The combined total of RCRA listed heavy metals shall not exceed 100 ppm when tested by X-ray fluorescence spectroscopy. The pigments shall also be heat resistant, UV stable and color-fast yellows, golds, and oranges, which shall produce a compound which shall match Federal Standard 595 Color No. 33538. The pigment shall be uniformly distributed throughout the thermoplastic compound."

Revise Article 1095.01(b)(1)e. of the Standard Specifications to read:

"e. Daylight Reflectance and Color. The thermoplastic compound after heating for four hours ± five minutes at 425 ± 3 °F (218.3 ± 2 °C) and cooled at 77 °F (25 °C) shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45 degree circumferential/zero degree geometry, illuminant C, and two degree observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm.

White: Daylight Reflectance75 percent min. *Yellow: Daylight Reflectance45 percent min.

*Shall meet the coordinates of the following color tolerance chart.

x 0.490 0.475 0.485 0.530 y 0.470 0.438 0.425 0.456"

Revise Article 1095.01(b)(1)k. of the Standard Specifications to read:

"k. Accelerated Weathering. After heating the thermoplastic for four hours ± five minutes at 425 ± 3 °F (218.3 ± 2 °C) the thermoplastic shall be applied to a steel wool abraded aluminum alloy panel (Federal Test Std. No. 141, Method 2013) at a film thickness of 30 mils (0.70 mm) and allowed to cool for 24 hours at room temperature. The coated panel shall be subjected to accelerated weathering

using the light and water exposure apparatus (fluorescent UV - condensation type) for 75 hours according to ASTM G 53 (equipped with UVB-313 lamps).

The cycle shall consist of four hours UV exposure at 122 °F (50 °C) followed by four hours of condensation at 104 °F (40 °C). UVB 313 bulbs shall be used. At the end of the exposure period, the panel shall not exceed 10 Hunter Lab Delta E units from the original material."

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

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

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

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

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

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

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

METHOD OF MEASUREMENT The unit of measurement is in hours.

<u>BASIS OF PAYMENT</u> 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.

WATER BLASTER WITH VACUUM RECOVERY (BDE)

Effective: April 1, 2006 Revised: January 1, 2007

Add the following to Article 783.02 of the Standard Specifications.

Revise Article 1101.12 of the Standard Specifications to read.

"1101.12 Water Blaster with Vacuum Recovery. The water blaster shall remove the stripe from the pavement using a high pressurized water spray with a vacuum recovery system to provide a clean, almost dry surface, without the use of a secondary cleanup process. The removal shall be to the satisfaction of the Engineer. The equipment shall contain a storage system that allows for the storage of the wastewater while retaining the debris. The operator shall be in immediate control of the blast head."

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

- 1. These contract provisions shall apply to all word 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.
- 2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
- A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
- 4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4 and 7; Section V, paragraphs 1 and 2a through 2g.

- 5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 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 DOL, or the contractor's employees or their representatives.
- 6. Selection of Labor: During the performance of this contract, the contractor shall not:
 - a. Discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
- b. Employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- 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 and 41 CFR 60 (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 Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American 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 State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
 - b. The contractor will accept as his 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, preapprenticeship, and/or on-the-job-training."
- 2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO 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

Page 1

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 minority group employees.
- 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 minority groups 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 employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group 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, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
 - c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group 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 his 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 his avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- 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. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.
- 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 minority group and women employees 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 his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. 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 best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
 - b. The contractor will use best 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 SHA 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 minority and women 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 minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) 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 SHA.
- 8. 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.
 - a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
 - b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.
 - c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.
- 9. 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 completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
 - a. The records kept by the contractor shall document the following:
 - The number of minority and non-minority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
 - (4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA 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. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
- c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers 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 (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the

contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) 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. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, 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 paragraphs 4 and 5 of this Section IV.

- b. 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.
- c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

- a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
- (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
- (2) the additional classification is utilized in the area by the construction industry:
- (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- (4) with respect to helpers, when such a classification prevails in the area in which the work is performed.
- c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification 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 DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour 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.

- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional 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 question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advised the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

- a. 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 or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.
- b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost 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.
- 4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

- (1) 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 DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/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 Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
- (2) The allowable ratio of apprentices to journeyman-level employees 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 employee 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 listed in 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 or subcontractor 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-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

- (3) 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 journeyman-level 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 for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.
- (4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

- (1) 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 DOL, Employment and Training Administration.
- (2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. 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.
- (3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level 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

Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor 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. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. 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.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federallyassisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's 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 SHA contracting officer 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.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her 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, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies 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 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

- 2. Payrolls and Payroll Records:
 - a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
 - b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof 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. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found 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 and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period).

The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V.

This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all suncontractors.

- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
- (2) that such 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 the Regulations, 29 CFR 3;
- (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- e. 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 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for

inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, 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 SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions 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.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

- 1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
 - a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
 - b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
 - c. Furnish, upon the completion of the contract, to the SHA resident engineer on /Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
- 2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 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 State. 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 contractors' own organization (23 CFR 635).
 - a. "Its own organization" shall be construed to include only workers employed and paid directly 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, assignee, or agent of the prime contractor.
 - 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 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 VII 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 SHA 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 SHA 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 SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

- 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 SHA 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. 333).
- 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. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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, the following notice 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:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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 not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more).

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- 2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
- 3. That the firm shall promptly notify the SHA of the receipt of

any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary 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 participant shall submit an 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 primary 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 department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary 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,""lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- f. The prospective primary 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 primary 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 Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

- 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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- i. 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.
- 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.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions

- 1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - b. Have not within a 3-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;
 - c. 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 1b of this certification; and
 - d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- 2. Where the prospective primary 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 Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- 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," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e. The prospective lower tie 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.
- 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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- 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 dealing.
- 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 Covered Transactions:

- 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 participation in this transaction 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.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(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 his or her bid or proposal that he or she 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.