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 Timothy.Garman@illinois.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.

	Proposal Submitted By
15	Name Address
	City

Letting April 25, 2008

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. 62934 COOK County Section (1516.1,1717&1818) I-5 **District 1 Construction Funds** Route FAI 94

PLEASE MARK THE APPROPRIATE BOX BELOW:

A Bid Bond is included.

A Cashier's Check or a Certified Check is included.

repared	by	

P

Checked by Printed by authority of the State of Illinois)

S

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</u> 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).

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**, 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.

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 CD-ROMS	217/782-7806



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of ______

Taxpayer Identification Number (Mandatory) ______a

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

Contract No. 62934 COOK County Section (1516.1,1717&1818) I-5 Route FAI 94 District 1 Construction Funds

Construction of five landscaped and irrigated medians along I-94 (Dan Ryan Expressway) from 76th Street to 67th Street in Chicago.

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.

BD 353A (Rev. 12/2005)

- 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:

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

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

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

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

In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual proposal. If the guaranty check is placed in another proposal, state below where it may be found.

The proposal guaranty check will be found in the proposal for:

Item	

Section No. _____

County _____

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

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

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

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

Schedule of Combination Bids

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

- 7. SCHEDULE OF PRICES. The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
- 8. **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.

C-91-170-05 State Job # -PPS NBR -1-74823-1503 County Name -COOK- LAKE-Code -31 - 97 -District -1 - 1 -

Project Number

Route

FAI 94

Section Number -(1516.1,1717&1818)1-5

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
A2002010	T-AESCULUS FLAVA 3	EACH	7.000				
A2008750	T-ULMUS X PAT PE 3 TF	EACH	2.000				
A2018730	T-ULMUS CARP NH SE 3	EACH	4.000				
C20099G5	S-SPIREA X BUM MC 5G	EACH	691.000				
C20132G5	S-WEIGELA FL MW 5G	EACH	262.000				
K0030400	PERENNIAL PLANT DAYLI	UNIT	6.200				
XX001363	PEREN PL NARCISSUS	UNIT	496.900				
	STRUCTURE ADJ	EACH	5.000				
XX104800		FOOT	4.000				
X0301407			74.190				
			52.000				
X0322256		SQ FT					
X0323426		EACH	6.000				
X0324491	CONC MED WALL 18 WIDE	FOOT	652.000				
X0324493	CONC MEDIAN SURF SP	SQ FT	1,086.000				
X0324525	PLANTING MIX F & P 36	SQ YD	602.000				

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C-91-170-05 State Job # -PPS NBR -1-74823-1503 County Name -COOK- LAKE-Code -31 - 97 -District -1 - 1 -

Project Number

Route

FAI 94

Section Number -(1516.1,1717&1818)1-5

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	H	Total Price
X0325027	MED & PVT REM (SPL)	SQ YD	932.000				
X0325102	INSPECTION PIPE 4	EACH	4.000				
X0325103	WATER METR IN VAULT 2	EACH	5.000				
X0325104	WATER TAP 2	EACH	5.000				
X0325105	IRRIGATION SYSTEM	SQ YD	1,195.000				
X0325106	IRR SYS FALL SHUTDOWN	EACH	5.000				
X0325107	IRR SYS SPRING STRTUP	EACH	5.000				
X0325108	BACKFLOW PREVNT RPZ 2	EACH	5.000				
X0325109	POROUS GRANULAR MATL	CU YD	170.000				
X0656300	PAVEMENT REM & REPL	SQ YD	7.000				
Z0013798	CONSTRUCTION LAYOUT	LSUM	1.000				
Z0027800	GEOTECH FABRIC	SQ YD	594.000				
20101000	TEMPORARY FENCE	FOOT	596.000				
20201200	REM & DISP UNS MATL	CU YD	90.000				
28000510	INLET FILTERS	EACH	1.000				

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C-91-170-05 State Job # -PPS NBR -1-74823-1503 County Name -COOK- LAKE-Code -31 - 97 -District -1 - 1 -

Project Number

Route

FAI 94

Section Number -(1516.1,1717&1818)1-5

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
31101400	SUB GRAN MAT B 6	SQ YD	386.000				
35300510	PCC BSE CSE 10 1/2	SQ YD	95.000				
40600200	BIT MATLS PR CT	TON	1.000				
40603340	HMA SC "D" N70	TON	22.000				
42001300	PROTECTIVE COAT	SQ YD	380.000				
42400200	PC CONC SIDEWALK 5	SQ FT	20.000				
44000500	COMB CURB GUTTER REM	FOOT	4.000				***************************************
44000600		SQ FT	20.000				
56104600		EACH	5.000				
56200900		FOOT	58.000				
60618390		SQ FT	909.000				
67000500		CAL MO	12.000				
67100100		LSUM	1.000				
70101800		L SUM	1.000				
70103816	TR CONT SURVEILLANCE	CAL MO	6.000		L	<u> </u>	

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648.000

C-91-170-05 State Job # -PPS NBR -1-74823-1503 COOK- LAKE-County Name -Code -31 - 97 -**District** -1 - 1 -Section Number -(1516.1,1717&1818)I-5

78300100 PAVT MARKING REMOVAL

Project Number

Route

FAI 94

ltem Unit of Number Measure **Unit Price Total Price Pay Item Description** Quantity Х = 70106800 CHANGEABLE MESSAGE SN CAL MO 12.000 FOOT 70300520 PAVT MARK TAPE T3 4 2,116.000 SQ FT 70301000 WORK ZONE PAVT MK REM 699.000 78000100 THPL PVT MK LTR & SYM SQ FT 78.000 78000200 THPL PVT MK LINE 4 FOOT 2,017.000 78000400 THPL PVT MK LINE 6 FOOT 231.000 FOOT 78000600 THPL PVT MK LINE 12 73.000 FOOT 48.000 78000650 THPL PVT MK LINE 24 78003110 PREF PL PM TB LINE 4 FOOT 136.000

SQ FT

Page 4 3/19/2008

CONTRACT NUMBER

62934

THIS IS THE TOTAL BID \$

NOTES:

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

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

I. GENERAL

A. Article 50 of the 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 \$171,000.00. Sixty percent of the salary is \$102,600.00.

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. No corporation shall be barred from contracting with any unit of state or local government. No corporation shall be barred from contracting with any unit of state or local government. No corporation shall be barred from contracting with any unit of state or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

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

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 Delinguency

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.

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.

M. Disclosure of Business Operations in Iran

Public Act 95-0616 provides that each bid, offer, or proposal submitted for a State contract shall include a disclosure of whether or not the Company acting as the bidder, offeror, or proposing entity, or any of its corporate parents or subsidiaries, within the 24 months before submission of the bid, offer, or proposal had business operations that involved contracts with or provision of supplies or services to the Government of Iran, companies in which the Government of Iran has any direct or indirect equity share, consortiums or projects commissioned by the Government of Iran, or companies involved in consortiums or projects commissioned by the Government of Iran and either of the following conditions apply:

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

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

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

Check the appropriate statement:

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

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

NOTICE

PA 95-0635 SUBSTANCE ABUSE PREVENTION PROGRAM (SAPP) Effective January 1, 2008

This Public Act requires that all contractors and subcontractors have a SAPP, meeting certain requirements, in place before starting work.

The as read low bidder is required to submit a correctly completed SAPP Certification Form BC 261 within seven (7) working days after the Letting. The Department will not accept a SAPP that 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 failure to comply the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, may deny authorization to bid the project if re-advertised for bids and may not allow the bidder to participate on subsequent Lettings.

Submittal and approval of the bidder's SAPP is a condition of award.

The SAPP is to be submitted to the Bureau of Design & Environment, Contracts Office, Room 326, 2300 South Dirksen Parkway, Springfield, IL 62764. Voice 217-782-7806. Fax 217-785-1141. It is the bidder's responsibility to obtain confirmation of delivery.

The requirements of this Public Act are a material part of the contract, and the contractor shall require this provision to be included in all approved subcontracts. The contractor shall submit the correctly completed SAPP Certification Form BC 261 for each subcontractor with the Request for Approval of Subcontractor Form BC 260A.

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. Disclosure Form Instructions

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 check the following certification statement indicating that the information previously submitted by the bidder is, as of the date of submission, current and accurate. Before checking this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder checks the Certification, the Bidder should proceed to Form B instructions.

CERTIFICATION STATEMENT

I have determined that the Form A disclosure information previously submitted is current and accurate, and all forms are hereby incorporated by reference in this bid. Any necessary additional forms or amendments to previously submitted forms are attached to this bid.

(Bidding Company)	
Signature of Authorized 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 <u>NOT APPLICABLE STATEMENT</u> on the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the 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 \$102,600.00? YES <u>NO</u>
- Does anyone in your organization receive more than \$102,600.00 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 \$102,600.00? 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.)

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

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

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

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

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

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

D. Bidders Submitting More Than One Bid

Bidders 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. Please indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms by reference.

The bid submitted for letting item _____ contains the Form A disclosures or Certification Statement and the Form B disclosures. The following letting items incorporate the said forms by reference:

RETURN WITH BID/OFFER

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

Contractor Name					
Legal Address					
City, State, Zip					
Telephone Number	Emai	il Address	Fax Nu	umber (if available)	
(30 ILCS 500). Vendors and potential conflict of the publicly available co ended contracts. A p	ation contained in this For desiring to enter into a co- interest information as spe- ontract file. This Form A ublicly traded company uirements set forth in Fo	ontract with the State of ecified in this Disclosu must be completed for may submit a 10K	of Illinois must re Form. This or bids in exce disclosure (4	disclose the financial information shall bec ss of \$10,000, and f or equivalent if ap	information come part of or all open-
		OF FINANCIAL IN			
terms of ownership or \$102,600.00 (60% of t	ncial Information. The ir distributive income share i ne Governor's salary as of Form A for each individu	n excess of 5%, or an 7/1/07). (Make copie	interest which s of this form	has a value of more	than
	pe or print information)	<u></u>	<u>u ee.</u>		
NAME:					
ADDRESS					
Type of owners	nip/distributable income sh	are:			
stock % or \$ value of o	sole proprietorship	Partnership	oth	er: (explain on separat	te sheet):

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

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

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

- 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois Toll Highway Authority? Yes ____No ___
- Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) provide the name the State agency for which you are employed and your annual salary.

RETURN WITH BID/OFFER

- If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes ____No ___
- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes ____No ___
- (b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years.

Yes <u>No</u>

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

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois Toll Highway Authority? Yes ____No ___
- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$102,600.00, (60 % of the Governor's salary as of 7/1/07) provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary.
- 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$102,600.00, (60% of the salary of the Governor as of 7/1/07) are you entitled to receive (i) more then 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes No ___
- 4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor?

Yes No

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

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

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

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

RETURN WITH BID/OFFER

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

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

Yes No ____

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page.

Completed by:

Signature of Individual or Authorized Representative

Date

NOT APPLICABLE STATEMENT

I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.

Signature of Authorized Representative

Date

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Procurement Related Information Disclosure

Contractor Name		
Legal Address		
5		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for bids in excess of \$10,000, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

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

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

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

THE FOLLOWING STATEMENT MUST BE CHECKED

 Signature of Authorized Representative	Date

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. 62934 COOK County Section (1516.1,1717&1818) I-5 Route FAI 94 District 1 Construction Funds

PART I. IDENTIFICATION

Dept. Human Rights #_

Duration of Project:

Name of Bidder: _

APPRENTICES ON THE JOB TRAINEES

PART II. WORKFORCE PROJECTION

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

TOTAL Workforce Projection for Contract											1	(ΕN		S		
		MINORITY EMPLOYEES				TRAINEES			TO CONTRACT									
JOB TOTAL							*OT	HER	APPREN- ON THE JOB			TOTAL			MINORITY			
CATEGORIES		OYEES		ACK	HISP			IOR.	TIC	-		INEES			OYEES		EMPLO	_
	М	F	М	F	М	F	М	F	М	F	М	F		Μ	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									-	Γ		FOR	DEI	DARTN	IENT US	E C		
TOTAL Training Projection for Contract										1 UK								
EMPLOYEES TOTAL IN EMPLOYEES BLACK							-	THER										
								NOR.	-									
TRAINING	M	F	Μ	F	М	F	Μ	F										

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

BC 1256 (Rev. 12/11/07)

Note: See instructions on page 2

Contract No. 62934 COOK County Section (1516.1,1717&1818) I-5 Route FAI 94 **District 1 Construction Funds**

PART II. WORKFORCE PROJECTION - continued

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

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

office or base of operation is located.

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

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

PART III. AFFIRMATIVE ACTION PLAN

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

Company _____

Address _____

NOTICE REGARDING SIGNATURE

The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed if revisions are required.

Signature:

_____ Title: _____ Date: _____

Telephone Number _____

All tables must include subcontractor personnel in addition to prime contractor personnel. Instructions:

- Table A -Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.
- Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees Table B currently employed.
- Table C -Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

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

Contract No. 62934 COOK County Section (1516.1,1717&1818) I-5 Route FAI 94 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)		
	Firm Name	
(IF A CO-PARTNERSHIP)		
Ϋ́ΥΫ́ΥΫ́ΥΫ́ΥΫ́ΥΫ́ΥΫ́ΥΫ́ΥΫ́ΥΫ́		
		Name and Address of All Members of the Firm:
_		
	Corporate Name	
		Signature of Authorized Representative
(IF A CORPORATION)		Typed or printed name and title of Authorized Representative
(IF A JOINT VENTURE, USE THIS SECTION	Attest	Signature
FOR THE MANAGING PARTY AND THE		° °
SECOND PARTY SHOULD SIGN BELOW)	Business Address	
	Corporate Name	
	Ву	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
(IF A JOINT VENTURE)	Attest	
		Signature
	Business Address	
If more than two parties are in the joint venture	e, please attach an ac	ditional signature sheet.



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

(Ellective November 1, 1992

Item No.

Letting Date

KNOW ALL MEN BY THESE PRESENTS, That We

as PRINCIPAL, and

as SURETY, are

held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in Article 102.09 of the "Standard Specifications for Road and Bridge Construction" in effect on the date of invitation for bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

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

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

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

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

their respective officers this	day of		A.D.,	·
PRINCIPAL				
(Company Na	ame)		(Company N	lame)
By:		By:		
(Signatu	re & Title)		(Signature of Att	orney-in-Fact)
Notary Certification for Principal and STATE OF ILLINOIS,	l Surety			
County of				
l,		, a Notary Put	blic in and for said County,	do hereby certify that
		and		
	(Insert names of individuals	signing on behalf of PRI	NCIPAL & SURETY)	
who are each personally known to n and SURETY, appeared before me and voluntary act for the uses and p	ne to be the same persons withis day in person and acknown	vhose names are subscr	ibed to the foregoing instru	ment on behalf of PRINCIPAL
Given under my hand and not	arial seal this	day of		A.D.
My commission expires				
			Notar	y Public
In lieu of completing the above sec marking the check box next to the s and the Principal and Surety are firm	Signature and Title line beld	w, the Principal is ensur	ing the identified electronic	c bid bond has been executed
Electronic Bid Bond ID#	Company / Bidder	Name	Sigr	nature and Title
				PDE 256P (Pov 10/24/07)

BDE 356B (Rev. 10/24/07)

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.
-	Item No.

Submitted By:

ame:	
ddress:	
hone 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. 62934 COOK County Section (1516.1,1717&1818) I-5 Route FAI 94 District 1 Construction Funds





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., April 25, 2008. 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. 62934 COOK County Section (1516.1,1717&1818) I-5 Route FAI 94 District 1 Construction Funds

Construction of five landscaped and irrigated medians along I-94 (Dan Ryan Expressway) from 76th Street to 67th Street in Chicago.

- 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, Secretary

BD 351 (Rev. 01/2003)

INDEX

FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2008

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

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-07) (Revised 1-1-08)

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FAI 94 (I-94) Section (1516.1, 1717 & 1818) I-5 Cook County Contract 62934

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2007: the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the reconstruction of FAI Route 94 (Dan Ryan Expressway), Section (1516.1, 1717 & 1818)I-5, in Cook County, Contract 62934 and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

F.A.I. Route 94 (Dan Ryan Expressways) Section: (1516.1, 1717 & 1818) I-5 County: Cook Contract: 62934

LOCATION OF PROJECT

The project is located along the section of Interstate 94 (Dan Ryan Expressway), between 67th Street and 76th Street in the City of Chicago. The work follows 67th Street, 75th Street and 76th Street and 76th Street and 76th Street and 10th Street and 26th Street and 26th Street and Lafayette Avenue, 75th Street and Lafayette Avenue, 75th Street and State Street, 76th Street and Lafayette Avenue and 76th Street and State Street. The length along the expressway between these three cross streets is approximately 0.19 miles.

DESCRIPTION OF PROJECT

The project consists of constructing median planting areas at the locations described. The work includes, but is not limited to the following:

67th Street Medians at Lafayette Avenue

- The installation an irrigation system. The work also includes installation of electrical and plumbing material and equipment required for the irrigation system, including but not limited to electrical conduit, wiring, junction boxes, water service lines, valves, meters, backflow preventers, and water taps to the existing main.
- Placement of planting mix, mulch and plant material.

75th Street Medians at Lafayette Avenue and State Street

- The removal and replacement of curb and gutter, sidewalk, median and pavement removal and replacement.
- The construction of concrete medians, concrete median wall and the installation an irrigation system. The work also includes installation of electrical and plumbing material and equipment required for the irrigation system, including but not limited to electrical conduit, wiring, junction boxes, water service lines, valves, meters, backflow preventers, and water taps to the existing main.
- Placement of porous granular materials, geotechnical fabric, planting mix, mulch and plant material.

76th Street Medians at Lafayette Avenue and State Street

- The installation an irrigation system. The work also includes installation of electrical and plumbing material and equipment required for the irrigation system, including but not limited to electrical conduit, wiring, junction boxes, water service lines, valves, meters, backflow preventers, and water taps to the existing main.
- Placement of porous granular materials, geotechnical fabric, planting mix, mulch and plant material.

The project also includes providing traffic control protection, informational signing and other incidental and collateral work.

MAINTENANCE OF ROADWAYS

Effective: September 30, 1985

Revised: November 1, 1996

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

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

STATUS OF UTILITIES TO BE ADJUSTED

Effective: January 30, 1987 Revised: July 1, 1994

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

<u>Name of</u> <u>Utility</u>	<u>Type</u>	<u>Location</u>	Estimated Dates for Start and Completion of Relocation or Adjustments
CDOT	PROPOSED 2" WATER SERVICE LINE IN CLOSE PROXIMITY TO AND CROSSES TRAFFIC SIGNAL DUCT.	Near Centerline of 76 th and State	No conflict anticipated. Contractor must hand excavate near duct.
DEPARTMENT OF WATER MANAGEMENT	PROPOSED 2" WATER SERVICE LINE CROSSES 6" SEWER.	Near Centerline of 75 th and State	No conflict anticipated. Contractor must hand excavate near sewer line.
CDOT	PROPOSED PAVEMENT EXCAVATION OVER TRAFFIC SIGNAL DUCT.	Near Centerline of 75 th and Lafayette.	No conflict anticipated. Contractor must hand excavate near duct.
CDOT	PROPOSED EXCAVATION MAY EXPOSE TRAFFIC SIGNAL DUCT.	Near Centerline of 75 th and Lafayette	No conflict anticipated. Contractor must hand excavate near duct.
COM ED	PROPOSED PAVEMENT EXCAVATION OVER DUCT PACKAGE.	Near alley east of 75 th and State	No conflict anticipated.

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

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 May 31, 2009, except as specified herein.

"The Contractor will be allowed to complete all clean-up work and punch list items within ten (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 guaranteed 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 of the Standard Specifications, or the Special Provision for Failure to Complete Work on Time, shall apply to both the completion date and the number of working days.

INTERIM COMPLETION DATE FOR PHASE I

The Contractor shall complete all Phase I work including bulb planting by October 31, 2008. The associated work to be completed in Phase I is as follows:

Phase I:

Installation of the irrigation systems, planting soil mix and complete all other work associated with these items for the 67th Street Median. Construction of the concrete median wall, concrete medians, porous granular material, irrigation systems, planting soil mix and complete all other work associated with these items for the 75th Street Medians.

Installation of the porous granular material, irrigation systems, planting soil mix and complete all other work associated with these items for the 76th Street Medians.

Installation of plant materials for the 67^{th,} 75th and 76th Street Medians.

COMPLETION DATE FOR PHASE II

The Contractor shall complete all Phase II work by May 31, 2009. The associated work to be completed in Phase II is as follows:

Phase II:

Weeding, watering and all work which is necessary to maintain the health and satisfactory appearance of all plant materials in the 67th, 75th and 76th Street Medians during the period of establishment (March 3, 2009 to April 30, 2009).

Installation of all required replacement plant materials and all required clean up the 67th, 75th and 76th Street Medians.

Remove all traffic control and open lanes to traffic.

FAILURE TO COMPLETE WORK ON TIME

Should the Contractor fail to complete the Phase I work on or before the interim completion date as specified in Special Provision for Interim Completion Date For Phase I or within such extended time as may have been allowed by the Department, the Contractor shall be liable to the Department in the amount of \$750.00 per day not as a penalty but as liquidated damages, for each calendar day or portion thereof of overrun in the contract time or such extended time as may have been allowed.

FAI 94 (I-94) Section (1516.1, 1717 & 1818) I-5 Cook County Contract 62934

Should the Contractor fail to complete the Phase II work on or before the completion date as specified in Special Provision for Completion Date For Phase II or within such extended time as may have been allowed by the Department, the Contractor shall be liable to the Department in the amount of \$750.00 per day not as a penalty but as liquidated damages, for each calendar day or 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 Department'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 Department's actual loss and fairly takes into account the loss of use of the roadway and utilities if the project is delayed in completion. The Department 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.

RESTRICTION ON WORKING DAYS

Effective: January 21, 2003

All temporary lane closures during the period governed by working days will not be permitted during the hours of 6:00 a.m. to 9:00 a.m. and 3:00 p.m. to 6:00 p.m. Monday through Friday.

All lane closure signs shall not be erected any earlier than one-half (1/2) hour before the starting hours listed above. Also, these signs should be taken down within one-half (1/2) hour after the closure is removed.

Failure to Open Traffic Lanes to Traffic: Should the Contractor fail to completely open and keep open all the traffic lanes to traffic in accordance with the limitations specified above, the Contractor shall be liable and shall pay to the Department the amount of \$250 per lane blocked, not as a penalty but as liquidated and ascertained damages, for each and every 15 minute interval or a portion thereof that a lane is blocked outside the allowable time limitations. The Department may deduct such damages from any monies due the Contractor. These damages shall apply during the period governed by guaranteed working days and any extensions of that contract time.

COORDINATION WITH ADJACENT AND/OR OVERLAPPING CONTRACTS

This contract abuts and /or overlaps with other concurrent Contracts as listed below. Each Contract includes work items requiring close coordination between the Contractors regarding the sequence and timing for the execution of such work items.

LIGHTING & SURVEILLANCE (Contract 62583) Dan Ryan Contract 2

Location	Letting Date	Tentative Completion Date
31 st ST to I-57 Interchange	April- 2005	October - 2008

Supplemental to the requirements of the Standard Specifications Article 105.08-Cooperation Between Contractors, the Contractors shall identify all such work items at the beginning of the Contract, and coordinate sequence and timing for their execution with the other Contractors through the Engineer. These work items shall be identified as separate line items in the Contractor's proposed Construction and Progress Schedule. Any conflicts between Contractor's schedules, the Department will be consulted through the Engineer to determine a resolution. Additional compensation or extension of the contract time will not be allowed for work and/or progress and/or lack of progress affected by lack of such coordination by the Contractor.

ADVANCED PUBLIC NOTIFICATION

Description.

This work shall consist of furnishing, installing, maintaining, relocating for various stages of construction, and eventually removing the advanced signing.

General.

The Contractor shall provide notice to the public a minimum of 14 days in advance of any work that requires the closure of lanes or ramps through the use of a changeable message sign or temporary information signing.

Basis of Payment.

This work will be paid as CHANGEABLE MESSAGE SIGNS in calendar months or TEMPORARY INFORMATION SIGNING in sq. ft.

CONTRACTOR'S DAILY WORK SCHEDULE

Description:

The Contractor shall submit a daily work schedule to the Engineer for the purpose of coordinating the Contractor's activities for the next working day. The daily schedule must be submitted by 3:00 pm the day before. This schedule is necessary for the Engineer to schedule inspection, testing and layout checking for the following day.

The schedule shall include the location and type of all work to be performed that day and all material deliveries. It shall identify all concrete pours, the concrete mix design numbers, and estimated number of cubic yards. The placement of bituminous materials shall be identified, including the mix design numbers, location and number of estimated tons to be placed. The Contractor shall identify all locations where survey verification is required and shall give sufficient advance notification to the Engineer so as not to cause delay.

Method of Measurement:

This coordination work will not be measured for payment.

Basis of Payment:

Preparation and submittal of the Contractor's Daily Work Schedule shall not be paid for separately, but shall be included in the cost of the contract items of work.

CHANGEABLE MESSAGE SIGNS

This item shall be as contained in the Special Provisions for "Portable Changeable Message Signs" except as follows:

"This message panel shall also be capable of being controlled by an IBM compatible computer from a remote location via a cellular linkage. The Contractor shall supply the modem, the cellular phone, and the necessary software to run the sign from a remote computer at a location designated by the engineer. The Contractor will also be required to promptly reprogram the computer to provide all messages as directed by the Engineer".

Two signs will be required for this contract. The signs shall be located as directed by the Engineer.

TEMPORARY INFORMATION SIGNING

Description:

This work shall consist of furnishing, installing, maintaining, relocating for various stages of construction and eventually removing temporary information signing.

Materials:

Materials shall be according to the following Articles of Section 1000 - Materials:

	ltem	Article/Section
a.)	Sign Base (Notes 1 & 2)	1090
b.)	Sign Face (Note 3)	1091
c.)	Sign Legends	1092
d.)	Sign Supports	1093
e.)	Overlay Panels (Note 4)	1090.01
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Note 1. The Contractor may use 5/8 inch instead of 3/4 inch 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 1091.02 (Type BB).

Note 4. The overlay panels shall be 0.08 inch thick.

General Construction Requirements

Installation:

The sign sizes and legend sizes shall be verified by the Contractor prior to fabrication.

Signs, which are placed along the expressway shoulder 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. above the near edge of the pavement and shall be a minimum of 2 ft. beyond the edge of the paved shoulder. A minimum of two posts per sign shall be used.

The attachment of temporary signs to the 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 edge to edge (horizontally and vertically). All hardware, posts or skids, supports, bases for ground mounted signs, and connections, which are required for mounting these signs shall be included as part of this pay item.

Basis of Payment:

This work shall be paid at the contract unit price per square foot for TEMPORARY INFORMATION SIGNING, which price shall be full compensation for all labor, equipment and materials required for performing the work as herein specified.

WORK ZONE TRAFFIC CONTROL (LUMP SUM PAYMENT)

Effective: February 1, 1996 Revised: November 1, 1996

Specific traffic control plan details and Special Provisions have been prepared for this contract.

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 meter (foot).

Basis of Payment: All traffic control and protection will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL). This price shall be payment in full for 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.

TRAFFIC CONTROL PLAN

Effective: September 30, 1985

Revised: October 1, 1995

Traffic Control shall be in accordance with 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

701601 – Urban Lane Closure Multilane 1W or 2W With Nontraversable Median

701606 – Urban Lane Closure Multilane 2W With Mountable Median

701701 – Urban Lane Closure Multilane Intersection

701801 – Lane Closure Multilane, 1W or 2W Crosswalk Or Sidewalk Closure

701901 - Traffic Control Devices

DETAILS

TC-14 Traffic Control and Protection At Turn Bays (To Remain Open To Traffic)

SPECIAL PROVISIONS

Temporary Information Signing Reflective Sheeting on Channelizing Devices Changeable Message Signs

CONTRACTOR OFF-STREET PARKING RESTRICTION

The Contractor and all employees working on this project will not be allowed to park their vehicles and equipment on frontage roads or streets. The Contractor shall provide off-street parking facility for all vehicles and equipment. He should also provide any transportation required to get his employees to and from the work site. The Contractor will provide the RE with written documentation of the off-site parking location.

The cost to comply with this requirement will not be paid for separately, but shall be considered as included in the contract unit bid prices of the contract, and no additional compensation will be allowed.

PLANTING MIX FURNISH AND PLACE

Work under this item shall be performed in accordance with Section 200 of the Standard Specifications for Road and Bridge Construction except as modified herein.

<u>Description</u>: This work shall consist of furnishing, transporting, testing, preparing, and placing planting soil including finish grading to the depth specified in areas as shown in the plans or as directed by the Engineer.

<u>General Requirements:</u> In general the planting soil shall be two (2) parts pulverized top soil and one (1) part coarse sand. The sand, in the amount required to produce an acceptable planting soil, shall be added and mixed during the pulverization process only. The sand shall be of an FA 2 gradation.

<u>Soil Stockpiling:</u> The Contractor shall obtain the total quantity of planting soil required for this project and stockpile this material at an acceptable offsite location a minimum of 30 days in advance of placement. The stockpile must be covered to avoid excessive moisture content and erosion. The Contractor shall have the material tested following the guidelines presented below under Soil Testing and, if approved, this stockpile shall be the sole source for planting soil to be delivered to site. The test results along with a Request for Inspection form should be sent to the Engineer prior to delivering the material to site. This transmittal must also identify the location of the stockpile. If there are any changes in source the Contractor shall notify the Engineer immediately. There will be no additional time allowed for the completion of this project in order to substitute, test, and approve a new source of planting soil.

<u>Delivery, Storage and Handling:</u> Protect soil from absorbing excess water and from erosion at all times. Do not store materials unprotected from large rainfall events. Do not allow excess water to enter site prior.

<u>Soil Testing</u>: No planting soil shall be delivered to the site until the Engineer has reviewed test results and has accepted the planting soil. The Contractor shall employ a soil testing agency acceptable to the Engineer, which uses test methods approved by the Association of Agricultural Chemists. Test frequency shall be as follows:

Quantity of Soil Placed (c.y.)	Number of Tests
1 - 200	1
200 – 1000	3
1000 <	((Quantity – 1000) / 500) + 3
	round up to whole number

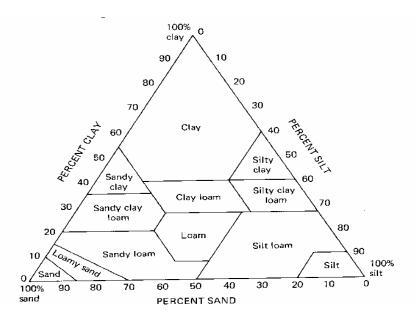
When more than one test is performed, the average of the test results will be used to determine acceptance.

The planting soil test report must obtain the following information:

Chemical Analysis:	ical Analysis:	HIGH	LOW
a.	pH	7.0	6.5
Mechanic	al Analysis		
a.	% clay	25%	0%
b.	% silt	77%	45%
C.	% sand	33%	25%

- 3. Additionally the following variables are required.
 - a. cation exchange capacity (CEC)
 - b. soluble salts
 - c. organic matter
 - d. phosphorous
 - e. available potassium
 - f. nutrients
 - g. residual chemicals

h. Recommendations to mitigate any issues from the results in items 3a through 3g.



The mechanical analysis should show that the % sand, % silt, and the % clay must yield a silt loam soil. See the attached Textural Classes diagram above. To determine the class plot a line parallel to the % clay axis starting the line at the value of the % silt. Plot another line parallel to the % sand axis starting the line at the value of the % clay. The intersection of these lines should be in the silt loam region, for the soil to be approved.

Preparation and Placement:

- 1. Perform or coordinate final adjustments of any utility structure.
- 2. Clean planters of all trash and debris before placement of soil mix. Remove and legally dispose of debris off site in accordance with Article 202.03. Repair to the satisfaction of the Engineer any portion of the geotechnical fabric or drainage layers prior to installation of planting soil mix.
- 3. Place, spread and rough grade specified planting soil to depths specified in all areas to be planted. Place planting soil mix in two level (2) lifts. The first lift shall contain 2/3 of the planter soil depth. After placing each lift, moisten the surface at a rate sufficient to hydraulically settle the soil, as determined by the Engineer. Allow water to thoroughly percolate through the soil before placing the next lift. Allow for settling, and place additional planting soil as necessary. Allow for placement and mixing of compost, as determined by the Engineer, but place enough soil mix to meet finish grades within =/- 0.10 foot of design grades.
- 4. Rake smooth and finish grade all planted areas. The removal of excess material or the addition of planting soil may be required prior to landscaping. This shall be considered incidental to planting soil. Grading will be to a tolerance +/- .10 foot of design grades. Any grade disturbed by irrigation installation shall be restored to finish grade and raked smooth.

5. All debris, litter, tire tracks, dirt, and unintended materials shall be removed, swept or washed off of all landscape, hard median surfaces, and pavement on a daily basis.

Planter Soil Acceptance:

The Engineer retains the right to visually inspect planting soil mix on site before placement. The Engineer may ask that material suspected of not meeting specification be removed from the site, until the material can be mechanically tested.

The final determination of the planter soil quality shall be based upon soil tests taken by the Engineer. The samples shall be taken at the time of planting soil installation. The samples will be tested by independent accredited agencies, for the Engineer. The test frequency shall be the same as listed above. When more than one test is required, the percentages of sand, silt and clay will be averaged. This averaged value will be used to determine the soil quality.

If the averaged test result for sand or silt content is outside the range specified by less than five (5%) percent, an adjusted unit price will be used in computing payment for the planting soil. The adjusted unit price will be a percentage of the contract unit price as given in the following schedule:

Average Sand or Silt Deficiency	Percent of Contract Payment
0 to 2	80
2.1 to 4	66
4.1 to 5	50

Clay content in excess of this specification by two (2%) percent or less: If the averaged result for clay is outside the range specified by less than two (2%) percent an adjusted unit price will be used in computing payment for the planting soil. The adjusted unit price will be sixty-six (66%) percent of the contract unit price.

The Contractor shall remove all planting soil and install material meeting this specification. The Contractor shall be responsible for all costs incurred to remove deficient material and install acceptable planting soil. The Contractor shall be responsible for any damage to plant material, irrigation system, waterproof membrane, or any other damage caused by this work. The Contractor shall be responsible for all additional traffic control. No addition time will be provided in the contract to perform remedial work.

<u>Method of Measurement</u>: Planting Mix Furnish and Place will be measured for payment in place to the depth specified in square yards. Areas not meeting the depth specified shall not be measured for payment.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per square yard (square meter) for PLANTING MIX FURNISH AND PLACE, 36". Payment shall include all testing, furnishing, stockpiling, transporting of materials, all labor and equipment necessary, disposal and incidentals required to complete the work as specified herein and to the satisfaction of the Engineer. Furnishing and Placing Compost shall be paid for separately.

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MEDIAN AND PAVEMENT REMOVAL (SPECIAL)

Work under this item shall be performed in accordance with Section 440 of the Standard Specifications and the Standard Details, except as herein modified.

<u>Description</u>: This item shall consist of the full depth removal and disposal of the existing median and pavement to the limits shown on the plans or as directed by the Engineer. This item shall include excavation of material from the top of the existing median or pavement surface to the bottom of the proposed subgrade elevation for: subbase granular material; and porous granular material; whichever is lower. This work shall include the removal and disposal of granular base and sub-base courses, stabilization stone, earth, slag of all types, curbs of all types, and abandoned structures to the required elevation.

Also included is the removal and disposal of existing street car track including rails, ties, pavement and/or ballast unless a separate pay item has been supplied in the contract for Track Removal, in which case the area of track removal shall not be included in this item.

<u>General Requirements:</u> The Contractor shall sawcut full depth a perpendicular clean joint between that portion of the median or pavement to be removed and that portion of the median, or pavement to remain in place. The cost of this work shall be considered incidental to the contract unit price of this item.

If the Contractor removes or damages the existing median or pavement outside of the limits designated by the Engineer for removal, he will be required to repair that portion at his own expense and to the satisfaction of the Engineer.

Any appurtenant median items including curb around planter cutouts and planter cutout contents, located within the existing medians marked for removal on the drawings, shall be included in this work at no additional cost.

Any trees less than six (6) inches in diameter within the existing medians that are not designated by the Engineer to remain or marked for transplanting on the drawings shall be removed and included in this work at no additional cost.

Removed median and pavement shall not be stockpiled on the job site but disposed of in accordance to Article 202.03.

If, upon removal of the median and pavement, a soft or unstable sub-grade is encountered at a location where pavement is to be replaced, this material shall be excavated and replaced with compacted porous granular material, of the gradation as determined by the Engineer. The cost of the excavation of unstable sub-grade will not be paid for separately but shall be considered incidental to this item. The cost of the replacement material shall be paid under POROUS GRANULAR MATERIAL.

<u>Method of Measurement</u>: Median and Pavement Removal shall be measured for payment in place and the area computed in square yards.

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<u>Basis of Payment</u>: MEDIAN AND PAVEMENT REMOVAL (SPECIAL) shall be paid for at the contract unit price per square yard, which price shall include full depth saw cut, removal and disposal of existing median and pavement, removal of existing street car track, aggregate base and all granular material to required elevation, trees less than six (6) inches in diameter, all types of abandoned structures, steel reinforcement and wire mesh, and compaction and proof rolling of subgrade.

PAVEMENT REMOVAL AND REPLACEMENT

Work under this item shall be performed in accordance with Sections 440 and 441 of the Standard Specifications and Detailed Construction Standards, except as herein modified.

<u>Description</u>: This work shall consist of full depth sawcutting, removal, disposal, and replacement of existing pavement that is not scheduled for removal but is to remain in place at locations of proposed sewers, manholes, drains, conduits and water services.

<u>General Requirements:</u> This work shall consist of full depth sawcutting of the existing pavement, the excavation of the existing pavement material, its legal disposal beyond the limits of the project, and full depth pavement replacement, including supplying, drilling, installing, and grouting dowel bars into the PCC base course of the adjacent pavement. If machine breaking is necessary because the existing pavement is concrete or has a concrete base, it shall be done to the satisfaction of the Engineer and in such a manner that any underlying utility structures will not be disturbed or damaged.

The materials and method for replacement of the removed pavement shall be as shown in the Detail Construction Standard or Plans, performed in accordance to Sections 353 and 406 of the Standard Specifications.

High-early strength PCC base course, bituminous materials prime coat, and "SuperPave" bituminous concrete binder and surface courses shall be used. These materials will not be measured or paid separately.

ITEM	AC TYPE	VOIDS	RAP %
BIT. CONC. SURFACE COURSE,	PG 64-22	4% @ 70 Gyr	10
SUPERPAVE, MIX "D", N70			

Also included in this item is any additional Traffic Control required to safely route traffic around the removed pavement and until the replacement pavement has cured and is ready to be opened to traffic. This Traffic Control shall include the use of arrow boards when required. The Engineer shall be the sole judge of the need for arrow boards. Traffic Control shall not be paid for separately but considered incidental to this item.

Removed sections of pavement shall not be left open over night, but shall be backfilled to existing elevation or plated. No additional payment shall be made for backfilling or plating sections of removed pavement.

<u>Method of Measurement:</u> Pavement Removal and Replacement will be measured for payment in square yards. Removal and replacement shall not be measured separately. The actual area of full depth replacement shall be used as the basis of payment.

<u>Basis of Payment</u>: PAVEMENT REMOVAL AND REPLACEMENT will be paid for at the contract unit price per square yard, which price shall include all labor, materials, and equipment to perform the work including full depth sawcutting, removal, disposal, traffic control, temporary backfilling, plating, sub-base, concrete base course, prime coat, binder and surface courses, dowel bars, and any other work required to complete this work as specified.

CONCRETE MEDIAN SURFACE

Work under these items shall be in accordance with the requirements of Section 606 of the Standard Specifications for Road and Bridge Construction and Standard Details, except as herein modified.

<u>Description</u>: This work shall consist of constructing Portland Cement Concrete (PCC) medians and corrugated medians at locations shown on the drawings and as directed by the Engineer.

<u>General Requirements</u>: Concrete shall be placed over improved sub-grade or sub-base or as shown in the plans. Concrete shall not be placed on soft, muddy, frozen or non-compacted sub-grade or sub-base.

Joints shall be in accordance with the drawings and the Standard Details. Preformed expansion joint material shall conform to Article 1051.03. Concrete shall be CLASS SI and conform to the requirements of Section 1020.

When directed by the Engineer, a protective surface treatment shall be applied, which will be paid for under the item for PROTECTIVE COAT. Membrane curing will not be permitted where at protective coat or water repellent is to be applied. Concrete at these locations shall be cured by another method specified in Article 1020.13 at no additional cost.

When shown on the plans, or directed by the Engineer, decorative scoring patterns whether sawed or hand tooled shall be considered incidental to these items.

<u>Method of Measurement</u>: Concrete Median Surface, (Corrugated) will be measured for payment in place and the area computed in square feet.

Concrete Median Surface, (Special) will be measured for payment and the area computed in square feet.

<u>Basis of Payment</u>: CONCRETE MEDIAN SURFACE (CORRUGATED), will be paid for at the contract unit price per square foot for which price shall include furnishing and placing all concrete, dowels, all joints, scoring patterns, and corrugations.

CONCRETE MEDIAN SURFACE, (SPECIAL) will be paid for at the contract unit price per square foot, which price shall include furnishing and placing all concrete, dowels, welded wire fabric, all joints, scoring patterns, and corrugations.

CONCRETE MEDIAN WALL, 18 INCH WIDE

Work under these items shall be in accordance with the requirements of Section 606 of the Standard Specifications for Road and Bridge Construction and Standard Details, except as herein modified.

<u>Description</u>: This work shall consist of constructing Portland Cement Concrete (PCC) median wall of the specified dimensions at locations shown on the plans and as directed by the Engineer.

<u>General Requirements</u>: Concrete shall be placed on compacted prepared sub-base which will be paid for separately. Concrete shall not be placed on soft, muddy, frozen or non-compacted sub-base. Joints shall be in accordance with the drawings, and Standard Details. Pre-formed expansion joint material shall conform to Article 1051.03. Concrete shall be CLASS SI and conform to the requirements of Section 1020.

When directed by the Engineer, a protective surface treatment or water repellent shall be applied, which will be paid for under the item for PROTECTIVE COAT. Membrane curing will not be permitted where at protective coat is to be applied. Concrete at these locations shall be cured by another method specified in Article 1020.13 at no additional cost.

When shown on the plans, or directed by the Engineer, decorative scoring patterns whether sawed or hand tooled shall be considered incidental to these items.

The use of slip form installation may be allowed when approved by the Engineer.

Epoxy coated reinforcement bars shall be installed as shown on the plans, in accordance with the requirements of Section 508 of the Standard Specifications. Materials shall meet the requirements of Article 1006.10. The reinforcement bars, when delivered on the job, shall be stored above the surface of the ground on wooden or padded steel cribbing, and shall be protected from mechanical injury and from deterioration by exposure. When placed in the work, they shall be free from dirt, paint, oil or other foreign substances. All systems for handling epoxy-coated reinforcement bars shall have padded contact areas. The bars or bundles shall not be dropped or dragged. Epoxy-coated reinforcement bars to be cut in the field shall be either sawed or sheared but shall not be frame cut. Patching of the bars cuts shall be in accordance with ASTM specifications. Placing and securing of the reinforcement bars shall be in accordance with Article 508.05. All tie wire shall be epoxy coated. The installation of epoxy coated reinforcement bars shall be considered incidental to these items.

<u>Method of Measurement</u>: The concrete median wall will be measured for payment in lineal feet, along the face of the concrete wall.

<u>Basis of Payment</u>: CONCRETE MEDIAN WALL will be paid for at the contract unit price per lineal foot of the specified width which price shall include steel reinforcement, furnishing and placing all concrete, joints and decorative scoring.

STRUCTURES TO BE ADJUSTED

This work will be done in accordance with Section 603 and applicable portions of Section 602 of the Standard Specifications and the Standard Detail for Type I, Frame Adjustment shown in the plans, except as herein modified.

<u>Description:</u> This item shall include all those existing catch basins, manholes, inlets, valve vaults, City Electric manholes or other structures which are to be adjusted to grade where twenty-four inches or less of masonry will be either added, removed or rebuilt to bring the specified casting to the finished grade of the proposed improvement. The maximum adjusting ring height is eight inches. If the adjustment exceeds a height of eight inches, the cone must be removed and the barrel section adjusted.

<u>General Requirements:</u> Prior to starting construction, an inspection of all the existing structures, will be made by the Engineer and the Contractor to determine the amount of existing debris in these structures. Upon completion of the work, the Contractor shall clean only those structures where debris has been added due to construction with the following additions, catch basins shall be cleaned of all construction debris and existing debris shall be removed to one foot below the half trap, inlets and storm sewer manholes shall be cleaned of all construction and existing debris, valve vaults for mains less than 24 inches in diameter shall be cleaned of all construction debris and existing debris and all existing debris shall be cleaned of all construction debris and all existing debris shall be removed to one foot below the "button". This work will not be paid for separately, but shall be considered incidental to this item.

Backfilling to subbase elevation shall be done with sand as specified in Article 550.07; however, no separate payment for backfilling will be made under these items and the work will be considered incidental to these items.

Bricks shall meet the requirements of Section 1041.

If in any load of brick more than ten percent are inferior, the whole load will be rejected. If less than ten percent are inferior, the brick may be accepted, provided the Contractor will, at his expense, cut out all inferior bricks, and remove them from the site of the work at once.

With approval of the Engineer the Contractor may use precast adjusting rings. Adjustment bricks, rings and structure frames are to be set in a full mortar bed. Shimming of the frame with wood and stones shall not be allowed. The interior of the adjustment shall be "buttered" to the satisfaction of the Engineer. Use of partial bricks will not be allowed. Bricks shall be laid in full header courses only.

Existing frames and lids that are obsolete or damaged shall be replaced when ordered by the Engineer in writing, except that existing frames and lids damaged by the Contractor's operations during construction shall be replaced by the Contractor at his expense.

Removal and patching of pavement around a structure shall be considered as part of the adjustment or reconstruction of that structure, and no additional compensation will be made.

Patching of pavement with Bituminous concrete shall not be allowed. Only High Early Strength Concrete meeting the requirements of Section 1001 and 1020 shall be used. Construction shall be in accordance with the applicable portions of Section 503 of the Standard Specifications.

Under no circumstance shall an adjustment not be completed in the same day as it is started. Under no circumstance shall debris be left in the street overnight.

The Contractor shall stage adjustment work so that the traffic flows in a safe manner.

<u>Method of Measurement:</u> Structure to be Adjusted will be measured on a per each basis which will include up to the first twenty-four inches of required masonry work.

<u>Basis of Payment:</u> STRUCTURES TO BE ADJUSTED will be paid for at the contract unit price per each, which price shall be payment in full for excavation, construction, backfilling, concrete, brick, mortar and disposal of surplus excavation, formwork and all labor and materials including reinforcement bars, and ladder rungs.

WATER SERVICE LINE, 2 INCH

<u>Description</u>: This work shall consist of excavation, furnishing and installing the water service line, and trench backfill. Water service line shall be installed from the Backflow Preventer, (RPZ) to the nearest planter, and between planters at the locations indicated on the plans or as directed by the Engineer.

<u>General Requirements:</u> The Water Service Line shall be installed in a trench at a minimum depth of thirty (30) inches below the finished elevation. The line shall be continuously snaked in alternate horizontal curves, in accordance with the pipe manufacturer's recommendations, to compensate for thermal contraction and expansion.

A tracing wire, 1/C # 14 cable, starting at the RPZ backflow preventer, shall be run continuously in the bottom of the trenches and through the sleeves alongside the full length of the PVC piping.

A warning tape shall be run continuously, at six (6) inches below grade, directly above the Water Service Line and for its full length. At street crossings, the warning tape shall be located above the pipe sleeve between the base course and the bottom of pavement. Acceptable warning tape shall be Presco Products Detectable Underground Utility Marking Tape # D2105-Blue or an equivalent type approved by the Engineer.

Horizontal and vertical separation requirements between water and sewer lines shall be in accordance with IEPA requirements.

The Water Service Line shall enter median planters beneath the concrete median and above the Geotechnical Fabric Envelope which surrounds the French Drain.

Excavation shall be in accordance with applicable portions of Section 202 of Standard Specifications. Excavation shall be the limited to the area shown on the plans and details. All shoring required shall be considered incidental to this item.

Pavement removal and replacement shall be paid for using applicable line items. Restoration of non-paved areas shall be paid using applicable line items.

Trench Backfill placed and compacted in accordance with Section 208 of the Standard Specification and shall be included in the cost of this item. Trench backfill shall be FA 2 gradation.

Water Service Line shall consist of irrigation mainline pipe, ductile iron sleeves, and additional conduits.

Irrigation Mainline Piping

The polyvinyl chloride (PVC) irrigation mainline piping shall connect to the copper water piping a minimum of five (5) feet downstream of the RPZ assembly and extend not less than four (4) feet inside of the planter.

The line shall be Class 200, Polyvinyl Chloride (PVC) with a minimum pressure rating of 200 PSI. Standard Dimension Ratio (SDR) 21, pressure-rated pipe, Type 1, Grade 1, as identified in ASTM D-1784. Pipe shall conform with the requirements of Commercial Standard CFS-256 and ASTM D-2241. The water service line shall meet or exceed the minimum requirements set forth by the American Society of Testing Materials (ASTM) and the National Sanitation Foundation (NSF). Materials used in manufacture of the service line piping shall contain the specified amounts of pigment, stabilizers, and other additives approved by the NSF for conveyance of potable water.

Pipe fittings, such as elbows and tees, shall be schedule 80 PVC meeting or exceeding the requirements of ASTM D-2466 for socket-type PVC fittings. Material shall be Type 1, Grade 1 white PVC (cell classification 12454B) and conform to ASTM D-1784. A PVC cap shall be temporarily installed on the downstream end of the Water Service Line to permit hydrostatic testing prior to connection to the Irrigation System.

After all PVC pipe joints, including the temporary end cap, are completely cured, and after shallow backfilling (leaving all joints exposed to view), the Irrigation Mainline shall be subjected to hydrostatic pressure testing using only water. Compressed air or gases shall not be used for testing. The line shall remain under low-pressure while it is visually inspected in its entirety. After repair of any leaks, the line shall be more heavily backfilled but still leaving the joints exposed pipe shall then be subjected to full city water pressure for not less than twelve hours. Removal of the temporary end cap, after completion of all testing, shall be included in this item.

Installation and testing of the Water Service Line 2 Inch shall be performed in a manner meeting the approval of the Engineer.

Ductile Iron Sleeves

Water Service Lines beneath pavement, sidewalk, alley, driveways, and concrete median wall, and concrete median surface must be installed in Ductile Iron Sleeves, 6 inch diameter.

Sleeve lengths shall extend not less than twelve (12) inches into planter or turf areas.

Method of Measurement: Water Service Line will be measured in per linear foot basis.

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<u>Basis of Payment:</u> WATER SERVICE LINE, 2 INCH shall be paid for at the contract price per foot, which price shall include all excavation, trench backfill, PVC piping, fittings, warning tape, tracing wire, ductile iron sleeves, additional conduits, hydrostatic testing, all permits and associated fees, and all other incidentals required to complete this work as specified herein and as shown on the plans.

WATER TAP, 2 INCH

<u>Description</u>: This work shall consist paying for and obtaining a water main tap permit from the City of Chicago Department of Water Management (CDWM), scheduling a date and time for the CDWM to perform the tap, excavation to the existing water main, exposing the water main, cleaning the exterior of the water main, installing copper piping from the water tap to the water valve assembly, and placing and compacting trench backfill for each of the water service connections shown on drawings or as directed by the Engineer.

<u>General Requirements</u>: This work must be performed by a City of Chicago Licenced Plumbing Contractor.

The Contractor shall obtain a Water Tap Permit from the City of Chicago Department of Water Management at 121 N. LaSalle Street (City Hall), Room 1111. The contractor must supply approved irrigation shop drawings which indicate maximum flow rates, length of taps from property lines, and any other information required by CDWM. The Contractor will be required to pay a fee to the Department of Water Management in order to obtain the permit.

The contractor must supply street opening permit from the CDOT Bureau of Traffic.

The Contractor must schedule the date and time to perform the tap with the CDWM. The tap date is approximately two (2) weeks following permit issuance. The tap date must be coordinated with the Construction Phasing and the Maintenance of Traffic Plans, to minimize traffic conflicts.

The Contractor shall not remove pavement or excavate trench to the water main more than one (1) working day prior to the scheduled tap, unless otherwise approved by the Engineer. The placement and anchoring of steel plates and all additional traffic control required shall be considered incidental to this item.

Excavation shall be in accordance with applicable portions of Section 202 of Standard Specifications. Excavation shall be the minimum area required to facilitate the water tap. All shoring required shall be considered incidental to this item. This item shall also include excavation required to install pipe from the water tap to the Water Valve Assembly.

The excavation for water taps to be installed under pavement shall be from the sub-grade elevation to the depth required to perform the water tap. The excavation for water taps under non-paved areas shall be from the existing surface elevation to the depth required to perform the tap. Excavation shall not be paid for separately but shall be considered incidental to this item. Pavement removal and replacement shall be paid for using applicable line items. Restoration of non-paved areas shall be paid using applicable line items.

The Contractor shall clean the exterior of the water main to facilitate placement of the "saddle" by CDWM to perform the water tap. The Contractor shall use equipment which will not damage the water main. If the water main is not prepared to the satisfaction of the CDWM the tap will not be performed and must be rescheduled.

The Contractor shall install Type K Copper Pipe, 2 inch diameter from the water tap to the Water Valve Assembly. This work shall be considered incidental to this item.

Trench Backfill shall be placed and compacted in accordance with Section 208 of the Standard Specification and shall be included in the cost of this item. Trench backfill shall be FA 2 gradation.

Method of Measurement: Water Taps will be measured on a per each basis.

<u>Basis of Payment:</u> WATER TAP, 2 INCH will be paid for per each, which price shall include all labor, material, and equipment required to complete the work as specified.

WATER METER IN VAULT, 2 INCH

<u>Description:</u> This work shall consist of excavation, furnishing and installing water meter in a concrete vault, Type K, 2 inch copper pipe, and sand backfill at locations indicated on the plans or as directed by the Engineer.

The water meter type and brand shall be in accordance with the Chicago Department of Water Management Standards and AWWA C-700. The vault shall be a precast concrete as shown on the details in accordance with section 504 of the Standard Specifications and as directed by the Engineer.

This item includes excavation, furnishing and installing the Type K, 2 inch copper pipe, and trench backfill from the water meter in vault to the backflow preventer (RPZ).

Excavation shall be in accordance with applicable portions of Section 202 of Standard Specifications. Excavation shall be limited to the area shown on the plans and details, or as directed by the Engineer. All shoring required shall be considered incidental to this item. Any dewatering required shall not be paid for separately but will be incidental to the contract unit price of this item.

Pavement removal and replacement shall be paid for using applicable line items. Restoration of non-paved areas shall be paid using applicable line items.

Trench Backfill shall be placed and compacted in accordance with Section 208 of the Standard Specification and shall be included in the cost of this item. Trench backfill shall be FA 2 gradation

The installation of the water service line shall conform to Section 562 of the Standard Specifications and the Chicago Department of Water Management requirements.

The Contractor must notify the Chicago Department of Water Management (312-744-3711) seventy-two (72) hours before this work commences so that the Chicago Department of Water Management can provide field inspectors to oversee this work.

Method of Measurement: Water meter in vault will be measured on a per each basis.

<u>Basis of Payment:</u> WATER METER IN VAULT, 2 INCH shall be paid for at the contract unit price per each which price shall include excavation, disposal of excavated material, meter, vault, frame and lid, fittings, connections and adjustments, Type K, 2 inch copper pipe, and sand backfill required to complete the work as specified.

WATER VALVE, 2 INCH

<u>Description:</u> Work associated with this item shall include excavation, the furnishing and installation of water valves and water valve service boxes, installation Type K copper water pipe, and sand backfill as indicated on the plans, and as directed by the Engineer.

Water valves, 2 inch, shall be curb stops fabricated of brass and provided with outlets suitable for copper connections. Curb stops shall be of the round-way type conforming to AWWA Standard C800-89 Underground Service Line Valves and Fittings.

This item includes excavation, furnishing and installing the Type K, 2 inch copper pipe, and trench backfill from the valve assembly to the water meter in vault.

Excavation shall be in accordance with applicable portions of Section 202 of Standard Specifications. Excavation shall be limited to the area shown on the plans and details, or as directed by the Engineer. All shoring required shall be considered incidental to this item.

Pavement removal and replacement shall be paid for using applicable line items. Restoration of non-paved areas shall be paid using applicable line items.

Trench Backfill shall be placed and compacted in accordance with Section 208 of the Standard Specification and shall be included in the cost of this item. Trench backfill shall be FA 2 gradation.

Curb Stops shall be housed in curb boxes. Curb boxes shall be screw type, with the base threaded to attach to the curb stop or shall be Buffalo or "arch" type, and of such construction that it shall be capable of extension to finished grade. Base sections and lids shall be cast of heavy, high grade iron. "Water" shall be marked on the lid. Curb stop and box shall be equipped with a shut-off rod, typically 2 inches shorter than the curb box at is maximum extension.

<u>Method of Measurement:</u> Water valves 2 Inch will be measured on a per each basis.

<u>Basis of Payment</u>: WATER VALVES 2 INCH will be paid for per each, which price shall include all labor, material, and equipment required to complete the work as specified.

BACKFLOW PREVENTER (RPZ), 2 INCH

<u>Description:</u> This item shall consist of excavation, installation of ASSE Standard backflow preventers, installation Type K copper water pipe, and sand backfill as indicated on the plans, and as directed by the Engineer.

<u>General Requirements:</u> Backflow preventers shall be of the size indicated for maximum flow rate and maximum pressure loss required. City approved with AGD Series air gap.

- 1. Working Pressure: 150 psi minimum except where otherwise indicated.
- 2. 2 Inches and Smaller: Bronze body with threaded ends.
- 3. 2-1/2 Inches and Larger: Bronze, cast-iron, steel, or stainless-steel body with flanged ends. Provide AWWA C550, interior protective epoxy coating for backflow preventers with cast-iron or steel body.

Interior Components must be Corrosion-resistant materials.

Other incidental items:

- 1. Strainer supplied within RPZ and compatible with size and capacity of unit, on the inlet.
- 2. Winterizing pipe caps.
- 3. RPZ Enclosure fastened to concrete base and concrete filled steel bollards.

Reduced-Pressure-Principle Backflow Preventer: ASSE 1013, with (OS&Y) gate valves on inlet and outlet, and strainer on inlet. Include test cocks and pressure-differential relief valve with ASME A112.1.2 air-gap fitting located between 2 positive-seating check valves for continuous pressure application.

- 1. Pressure Loss: 15 psig maximum, through middle third of flow range.
- 2. Gate valves supplied with and compatible for size and testing of unit on inlet and outlet. Valves 2 inches (50 mm) and smaller may be ball valves if these are unit manufacturer's standard valve for this application.
- 3. Test Kit: Unit manufacturer supplied, complete calibrated backflow preventer testing equipment kit with carrying case.

Anti-siphon, Pressure-Type Vacuum Breakers: ASSE 1020, with valves, spring-loaded check valve, and spring-loaded floating disc. Include test cocks and atmospheric vent for continuous pressure application.

- 1. Pressure Loss: 6 psig maximum, through middle third of flow range.
- 2. Gate valves supplied with and compatible for size and testing of unit on inlet and outlet. Valves 2 inches and smaller may be ball valves if these are unit manufacturer's standard valve for this application.
- 3. Test Kit: Unit manufacturer supplied, complete calibrated backflow preventer testing equipment kit with carrying case.

Pressure Gauge:

ASME B40.1, 4-1/2-inch (115 mm) diameter dial, with dial range of 2 times system operating pressure and bottom outlet.

Concrete Base: Concrete: Portland cement mix, 3000 psi.

- 1. Cement: ASTM C 150, Type I.
- 2. Fine Aggregate: ASTM C 33, sand.
- 3. Coarse Aggregate: ASTM C 33, crushed gravel.
- 4. Water: Potable.

Reinforcement: Steel conforming to the following:

- 1. Fabric: ASTM A 185, welded wire fabric, plain.
- 2. Reinforcement Bars: ASTM A 615, Grade 60, deformed.

Backflow Preventers: RPZ's shall be FEBCO Model No. 825YA or an approved equivalent complete with shutoff valves, wye strainers shall be FEBCO Model 650 or an approved equivalent. RPZ's shall be furnished with flanged unions to facilitate field removal for freeze protection or maintenance. All work shall be in accordance with Chicago Department of Water Management Standards.

Valves for above ground installation shall be

- A. Grinnell Supply Sales Co., Grinnell Corp.
- B. Milwaukee Valve Co., Inc.
- C. Nibco, Inc.
- D. Hammond Valve Div., Prairie Manufacturing Corp.
- E. Or an approved equivalent

This item includes excavation, furnishing and installing the Type K, 2 inch copper pipe, and trench backfill from the backflow preventer (RPZ) to a point five (5) feet downstream. From that point the system will either be paid as IRRIGATION SYSTEM or WATER SERVICE LINE.

The copper piping may be converted to PVC pipe five (5) feet downstream of the backflow preventer.

Excavation shall be in accordance with applicable portions of Section 202 of Standard Specifications. Excavation shall be the limited to the area shown on the plans and details, or as directed by the Engineer. All shoring required shall be considered incidental to this item.

Pavement removal and replacement shall be paid for using applicable line items. Restoration of non-paved areas shall be paid using applicable line items.

Trench Backfill placed and compacted in accordance with Section 208 of the Standard Specification and shall be included in the cost of this item. Trench backfill shall be FA 2 gradation.

Method of Measurement: Backflow preventers (RPZ) will be measured per each installed.

<u>Basis of Payment:</u> BACKFLOW PREVENTER (RPZ), 2 INCH shall be paid for at the contract unit price per each, which price shall include excavation, disposal of excavated material, backflow preventer (RPZ), enclosure, locks, keys, pipe caps, installation of Type K copper piping, and sand backfill required to complete the work as specified.

GEOTECHNICAL FABRIC

<u>Description</u>: This work shall consist of placing Geotechnical Fabric for French Drain in landscaped areas, as shown on the plans or as directed by the Engineer.

<u>General Requirements</u>: The fabric shall be delivered to the jobsite is such a manner to facilitate handling and incorporation into the work without damage. In no case shall the fabric be stored and exposed to direct sunlight that might significantly diminish its strength or toughness. Torn or punctured fabric shall not be used.

After the trench has been approved by the Engineer, the fabric shall be loosely rolled out so the center of the fabric is at the centerline of the excavated trench, and it will not tear when the aggregate is placed. When more than one section of fabric is used, the fabric shall overlap a minimum of two (2) feet. Enough fabric shall remain uncovered after the trench is filled to provide for fabric to overlap a minimum of two (2) feet at the top.

During backfilling with Porous Granular Material, a minimum 6-inch cushion of the aggregate shall be carefully placed over the lined trench before end dumping larger aggregates out of trucks or other equipment. Following the backfilling operation, the fabric shall be lapped over the top and covered with soil.

Materials for the geotechnical fabric shall meet the requirements of Section 1080.05 of the Standard Specifications.

<u>Method of Measurement</u>: Geotechnical Fabric will be measured for payment in place and the area computed in square yards. The additional fabric required for overlaps of individual sheets and overlaps at the top of the french drain will not be measured for payment.

<u>Basis of Payment</u>: GEOTECHNICAL FABRIC will be paid for at the contract unit price per square yard, which price shall include all labor, material and equipment for furnishing, transporting, and installing the material in place.

POROUS GRANULAR MATERIAL

Work under this item shall be in accordance with the requirements of Section 207 of the Standard Specifications except as herein modified.

<u>Description</u>: This work shall consist of furnishing, transporting and placing porous granular material.

<u>General Requirements</u>: Materials placed as French Drains in medians shall be of CA (1) or CA (3) gradation as described in Section 1004 of the Standard Specifications. Geotechnical Fabric and Inspection Pipes shall be paid for separately.

Material placed as backfill, or other applications shall be meet the requirements of Section 1003 and 1004 of the Standard Specifications, except that wet bottom boiler slag as defined in Article 1004.01 will not be allowed. The gradations for different applications shall be determined by the Engineer. The use of limestone, crushed concrete, or any other lime bearing material will not be permitted within two (2) feet of any planted area.

The aggregate shall be placed in six (6) inch layers, loose measurement, and compacted in a manner approved by the Engineer, except that if the desired results are being obtained, the compacted thickness of any layer may be increased to a maximum thickness of eight (8) inches.

<u>Method of Measurement</u>: Porous Granular Material will be measured for payment in cubic yards, compacted in place and the volume computed by the method of average end areas.

<u>Basis of Payment</u>: POROUS GRANULAR MATERIAL will be paid for at the contract unit price per cubic yard, which price shall include all labor, material and equipment for furnishing, transporting, placing and compacting the material in place.

INSPECTION PIPE, 4 INCH

<u>Description</u>: This work shall consist of the installation of inspection pipe, 4 inch diameter at an approximate 100' spacing along the landscaped medians as indicated on the plans or as directed by the Engineer.

<u>General Requirements</u>: Inspection Pipe, 4 inch shall extend from 3 inches above the mulch surface to the bottom of the French Drain, as shown in the plans.

The Inspection Pipe, 4 inch shall be Polyvinyl Chloride (PVC) pipe. The bottom 3 inches of the Inspection Pipe, 4 Inch shall be notched as indicated on plan details.

The top of the Inspection Pipe, 4 Inch is to be capped by use of a threaded cap. The cap must be easily removed by use of a hand wrench.

Geotechnical fabric shall be secured around the inspection pipe by use of a stainless steel adjustable pipe clamp. The geotechnical fabric secured to the inspection pipe shall over lap the French Drain system a minimum of two (2) feet. This work is considered incidental to this item.

A $3/4 \times 3/4$ inch or 3/4 inch diameter wooden rod, the same length as the Inspection Pipe, shall be placed inside the pipe.

Method of Measurement: Inspection Pipe, 4 Inch will be measured on a per each basis.

<u>Basis of Payment</u>: INSPECTION PIPE, 4 INCH shall be paid for at the contract unit price per each. This price shall include all labor, material and equipment required to complete this item.

IRRIGATION SYSTEM

Description:

- A. This work includes design and installation of the irrigation system as indicated on the drawings and as specified herein.
- B. Contractor shall prepare design drawings and shop drawings for approval by the Engineer and the Department of Water Management prior to commencement of any work on this item.

- C. This work shall include all labor, material, equipment, permits, and services to construct the irrigation system as designed in approved shop drawings, in accordance with Sections 561, 562, 563, and 565 of the Standard Specification for Road and Bridge Construction and the Standard Construction Details, except as herein modified.
- D. This work shall include monitoring and adjusting the completed system to assure healthy plant development.

Water Services:

- A. Work described in the items WATER TAP, 2 INCH; WATER VALVE, 2 INCH; WATER METER IN VAULT, 2 INCH; BACKFLOW PREVENTER (R.P.Z.), 2 INCH; and WATER SERVICE LINE, 2 INCH; will collectively be described as Water Service Components within this specification.
- B. Water Service Components must be installed prior to the installation of the irrigation system, unless otherwise approved by the Engineer.
- C. The Water Service Components to be provided in this <u>contract</u> are shown in the plans. The number of water services and sizes shown in the plans have been designed to provide an adequate amount of water supply to service the areas to be irrigated (based on City of Chicago average water main pressure). If it is determined the Irrigation System requires a greater water supply to conform with the requirements of this specification the Contractor must notify the Engineer immediately. Contractor is to verify existing water pressure at the main and notify the Engineer in writing.
- D. The locations of Water Service Components are shown on the plans schematically. The location the Water Service Components will be determined by the Engineer in the field. The irrigation system must be designed to accommodate the location of the Water Service Components as installed.

Electrical Services:

- A. The items contained in this contract used to supply electrical power for the irrigation system will be collectively described as the Electrical Service within this specification.
- B. Electrical Services are not required for battery or solar powered irrigation system controllers. The types of controllers to be used are shown on the plans. THIS CONTRACT WILL USE BATTERY POWERED CONTROLLERS.
- C. This specification includes requirements for both battery and electrical powered components. Therefore, some items are dependent on the type of system to be installed.
- D. Electrical Services will be obtained from either a new service from a Commonwealth Edison power source, or from a street lighting controller.
- E. Electrical services for pump stations <u>must</u> be obtained from a Commonwealth Edison power source.

- F. Electrical Service will extend to the pump station or irrigation system controller, and paid for using appropriate items. All electrical components from the pump station or irrigation system controller required to operate the irrigation system in accordance with this specification is considered incidental to this item and must be shown on the shop drawings.
- G. Contractor shall label all wire and circuit breakers to indicate they belong to the irrigation system, as directed by the Engineer.

Codes and Standards:

- A. Codes: All plumbing work shall be installed within applicable provisions of the City of Chicago building codes.
- B. All devices and their installation must be in accordance with the City of Chicago Plumbing Code.
- C. Standards: Items listed to conform to ASTM, ANSI, or manufactures recommendations, for installation.

Design:

The design will be completed, reviewed, and signed by a Licensed Professional Engineer or a Licensed Plumber. The design will follow these guidelines:

- A. Max velocity = 5 feet per second.
- B. Spray head distribution system shall be designed, unless the existing water main pressure is not sufficient. If main pressure is not sufficient a drip line system could be designed if approved by the Engineer.

C. Spray Heads Minimum Height: Non-Turf Areas: 12 inches expandable to 18 inches

Turf Areas: minimum 4 inches or sufficient height to account for grade differentials

D. PSI variance:

All spray heads should operate at ± 3 psi at every spray head within a zone. All zones should operate at ± 3 psi at every zone within a system.

E. Isolation Valves:

Median Planters	Isolate each median planter
Parkway Planters	Isolate every 300 feet
Turf, Parks, & Malls	Per Engineer's Approval

F. Head Spacing:

Median and Parkway Planters:10 feet max spacingTurf, Parks, Malls, and Plazas:50% of the diameter of throw minimum.Square or triangular spacing must be used.The heads should have a matchedprecipitation rate.50% of the diameter of throw minimum.

- G. Angle of Trajectory: Should be calculated so that the spray will be above the mature plant height.
- H. Precipitation: Non-turf: Minimum 1 ½ Inch per week Turf: Minimum 1 Inch per week
- I. Watering Run Times: Spray Head: Three (3) waterings per week, eight (8) hour per watering maximum duration. Drip: Three (3) run times per week, twenty-four (24) hour per watering maximum duration.
- J. Wiring size: calculations must be made to account for voltage drops and any splicing must be reflected on the shop drawings.
- K. Quick Couple Valves Spacing: Median Planters: Parkway Planters:
 Parkway Planters:
 Parks, Malls and Plazas:
 200 feet or 1 per median
 200 feet or 3 per block
 100 feet radius between valves, minimum

L. Master Irrigation System Control Valve A master control valve shall be installed in the irrigation mainline piping at a designated location specified by the Engineer during construction and on Public Property. The valve shall only be open during irrigation run times. The valve must be located in a valve box.

Submittals:

- A. Shop drawings shall be prepared by a Licensed Professional Engineer or a Licensed Plumber with proven experience in the design of irrigation systems of the magnitude of this project.
- B. Shop drawings shall include pipe detailing, controller layout, fabrication and installation of irrigation systems. Indicate plans, elevations and dimensions, including all accessories.
- C. Submittals shall include hydraulic calculations for circuit pressure losses and existing water pressure at the main.
- D. Submittals shall include wiring sizes and electrical calculations.
- E. Submittals shall include a complete package of catalog cut sheets for all equipment used in this irrigation system.

Manufacturers and Minimum Requirements:

Manufacturers: All products list herein are acceptable. However, the contractor can specify other products. These will be subject to review for approval prior to installation. Judgment of whether a product is equal to the approved will be based on the product information sheet, and the Engineer's past experiences with products.

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1. <u>PVC or Polyethylene Piping & Fittings:</u>

All sprinkler piping mainlines and lateral pipe shall be SDR-21, Class 200, Polyvinyl Chloride (PVC) with a minimum pressure rating of 200 PSI. Pipe shall be permanently and continuously marked with the manufacturer's name, trademark, size, type, and National Sanitation Foundation (NSF) seal of approval. Pipe shall conform with the requirements of Commercial Standard CFS-256 and ASTM D-2241. PVC pipe shall be as manufactured by Crestline, or approved equivalent.

All PVC fittings shall be solvent weld, Schedule #40 and shall conform to ASTM D-2466. Fittings shall be manufactured from PVC Type I materials and shall meet National Sanitation Foundation (NSF) standards. PVC fittings shall be as manufactured by Spears Manufacturing Company, or approved equivalent. PVC fittings shall be joined with an approved PVC primer and cement.

Polyethylene piping 1 inch thru 1 ½ inch can be used for lateral piping, (down stream of the control valve). The pipe shall be polyethylene NT80 irrigation pipe SIDR-15 PE2406 NSF-PW ASTM D 2239 PPFA manufactured by Crestline, or approved equivalent. The pipe must be permanently continuously labeled accordingly. The insert fittings are to be constructed of PVC and shall conform to ASTM D 2609 and National Sanitation Foundation Standard #14 plastic fittings for potable water. Insert fittings shall be clamped to pipe with two (2) stainless steel crimp type clamps on each pipe end.

Plastic insert fittings for polyethylene plastic pipe are manufactured by Spears Manufacturing Company, or approved equivalent. Clamps shall be manufactured by Oetiker, or approved equivalent.

2. Installation Main & Lateral Piping:

All sprinkler main lines shall be installed by open trench method using either a chain type trencher or hand excavated. Trenches shall be excavated so as to provide sufficient depth and width to permit proper handling and installation of pipe and fittings. Excavate the trench deep enough to provide a minimum of 18 inches of cover over the pipe. Ensure that the bottom of the trench is clean and smooth with all rock, loose soil and organic matter removed. Trench bottom must provide a smooth and continuous bearing surface to support the pipe.

When the cutting of pipe is required the pipes shall be cut clean and square with all burrs removed prior to solvent welding. Pipe must be free of all dust, dirt, moisture, grease, oil, or any other foreign material.

Pipe shall be joined by solvent welding method using a quality primer and cement applied according to the manufacturer's recommendation. Excess solvent shall be wiped clean from the pipe and fittings.

Sprinkler lateral piping may be installed by either open trench method or with an approved "vibratory plow". Where the open trench method is employed, the above specifications shall apply. In both the "open trench" method and the "vibratory plow" method, the minimum depth of cover for the lateral lines shall be 18 inches.

Where the "vibratory plow" method is used, the "mole" or "bullet" of the plow which precedes the pipe and is used to form the opening for the pipe shall not be less than 1 inch larger diameter than the outside diameter of the pipe. Starting and finishing holes shall be of sufficient size to allow for proper connection of the required fittings.

For polyethylene pipe, the insert fittings are to be clamped with stainless steel clamps. All fittings are to be double clamped securely over the barbs on fittings.

Detectable Warning Tape shall be installed over all pipes. The tape shall be placed so that it is 6 inches above the top of the pipe. Polyethylene film warning tape manufactured for marking and identifying underground utilities, 4 inches wide and 5 mils thick minimum continuously inscribed with "Irrigation" detectable by metal detector when tape is buried up to 30 inches deep.

3a. <u>Irrigation Controllers (Electric Operated):</u>

The irrigation controllers shall accommodate all zones plus 3 extra zones, providing for complete automatic operation of the system. Run time for the controller shall be 0-2 Hours per station and shall provide for schedules of up to 2 weeks with interval scheduling available as an alternate method. The controllers shall have a seasonal adjust features capable of increasing or decreasing station timing from 0% to 200%. The controllers shall have a non-volatile memory capable of holding program information during power outages.

The controllers shall have a 365-day calendar, which automatically adjusts for leap year.

The controllers shall be programmable for up to 32 start times per day per program and shall be capable of operating 24 Volt AC electric remote control valves via a 30 Volt AC transformer.

The controller cabinets shall be constructed of cold forged stainless steel, and have a key-lockable door for vandal resistance.

The controllers shall be UL listed.

The controllers shall be Rainbird model ESP-MC, or approved equivalent.

3b. <u>Battery Operated Controller:</u>

1. The controller shall be 6VDC powered, have 3 independent programs that offer concurrent operation capability, have a large easy-to-read LCD display, have a non-volatile memory that retains all program data, a 365-day calendar, and be able to skip up to 50 days.

2. The battery operated controller shall be as manufactured by Irritrol Systems (or equivalent) and as a minimum have the capabilities of an IBOC 12 PLUS Series Controller. If latching solenoids are needed to convert valves from AC to DC, their cost and any other costs incurred for having a battery operated controller for the irrigation system are included under this pay item.

4. Install Irrigation Controller (Electric Operated):

The irrigation controller is to be installed in a cabinet. The cabinet shall be brown in mulched areas and green in turfed areas or as directed by the Engineer. The cabinet shall have a single duplex outlet securely fastened. The cabinet will be able to be locked with a single lock. The lock will be provided by the Engineer. The cabinet will have the dimensions and installed per the details in the plans.

Weatherproof break-away in-line fuses shall be installed in the electrical service cable prior to the connection to the controller. The fuses shall be in the controller cabinet.

The low voltage irrigation control wiring is to be installed in 2 inch steel heavy wall electrical conduit for protection. The conduit shall run from the controller, down and out 12 inches into the soil area. Conduit fittings are to be used to make 90 degree turn backs on the conduit at points of exit from the walls. (In no case shall the low voltage irrigation control wiring be installed in Class 160 or 200 PVC sprinkler pipe and Schedule 40 PVC 90-degree elbows).

The locations of all zones and recommended run times shall also be labeled on the controller along with the name, address, and phone number of the irrigation Installer.

The Contractor is responsible for obtaining any electric permits required for the low voltage wiring.

The irrigation controller shall be installed in a secured enclosure (cabinet). The enclosure shall be UL NEMA 4X Hinge Clip with provisions for a padlock and safety chain for door stops. The approximate dimensions are 20"x20"x8" with 4 legs. It shall be constructed of all stainless steel type 316 code gauge all seam weld grinded smooth. All conduits shall enter from the bottom. The enclosure shall be equipped with proper ventilation. The enclosure shall be primed and painted (brown in mulch area and green in turf area or black if determined by the Engineer). The controller and equipment shall be mounted on a back plate. It shall include a disconnect, GFI protection, duplex outlet, and protected fuses. All equipment housed in the enclosure shall be labeled as UL assembly. The enclosure shall be securely fastened square and level to the concrete pad using all stainless steel fasteners.

5a. <u>Automatic Control Valves (Electric Operated):</u>

Automatic Control Valve shall be female pipe inlet and female pipe outlet connection. The diaphragm shall be of rubber construction to retain flexibility and provide maximum sealing throughout its area.

The valve shall have a manual flow control, with a hand-operated, rising-type flow control stem with control wheel/handle. All parts shall be serviceable without removing valve from the line.

18 inch solenoid lead wires shall be attached to a 24 VAC, 50/60 cycle solenoid with waterproof molded coil. The valves shall be normally closed.

The automatic control valve shall be model PEB series as manufactured by Rainbird.

5b. Solenoid & Control Module for Control Valves (Battery Operated)

If electric power is not readily available the irrigation system shall be operated with latching solenoids, control modules and field transmitters. The latching solenoid shall be supplied with an installed filtered adapter allowing installation of the solenoid to the appropriate solenoid valve.

The DC latching solenoid shall be as manufactured by Rain Bird Sprinkler Mfg. Corp. or an approved equivalent.

6a. Installation Automatic Control Valves (Electric Operated):

The automatic control valves are to be installed at the locations indicated on the shop drawings. All PVC shall conform to the Section 1. PVC Piping and Fittings. Schedule 80 toe-nipples are to be used on the up stream and down stream sides of the valve. Wire splicing for valves to follow Section 12 of this specification, CONTROL WIRING. Valves shall be assembled so that they fit comfortably and properly in the valve boxes allowing sufficient room for service. Every effort should be made to install the valves, and valve boxes, in a location where they will not interfere with foot traffic or the maintenance of the landscape.

6b. <u>Installation Solenoid and Control Module for Control Valves (Battery Operated)</u> The control module shall be mounted inside the valve box with stainless steel fasteners. It will be mounted for ease of accessibility and connection to irrigation controller.

At sometime after the completion of this project, the Engineer may deem it necessary to utilize a power source. Wiring as for the model PEB series as manufactured by Rain Bird is required. The wiring should terminate at the location of the RPZ.

- 7. <u>Heads; Rotary, Spray, Swing Joints:</u>
 - a. Median and Parkway Planters: The Sprinkler Heads shall be fixed spray type designed for in-ground installation. The body of the sprinkler shall be constructed of non-corrosive heavy -duty cycolac. The sprinkler heads shall have a riser screen filter to prevent entry of foreign materials to the nozzle. All parts shall be removable through the top of the sprinkler case. The sprinkler heads shall have a stainless steel retraction spring to ensure positive pop-down and shall have a Conilip seal and cap to provide proper sealing.

The sprinkler heads shall be of pop-up design with an overall body height of 16 inches, and have a pop-up stroke of 12 inches.

The Spray Heads shall be Model 1812 for landscaped areas as manufactured by the Rainbird, for turf areas Model 1804 is permitted provided that available pressure does not allow for the use of rotary heads.

b. Turf Areas (when approved by the Engineer): Full and Part Circle Rotary Sprinkler Heads shall be gear drive rotary sprinkler heads with a built in check valve to eliminate low head drainage. Radius reduction shall be adjustable by up to 25% by means of radius adjustment screw accessible from the top of the cap. Water distribution shall be via two (2) nozzles mounted in a stainless nozzle turret. The dual nozzles shall elevate 2-3/8 inches when in operation. Retraction shall be achieved by a heavy-duty stainless steel retraction spring. The sprinkler head shall have a riser seal and a wiper which permits limited flushing on the up and down stroke. Rotation shall be accomplished by a planetary gear assembly. The sprinkler head housing shall be of high impact molded plastic with a 1 inch NPT connection.

The rotary heads shall be I-25 ADS series with stainless steel sleeve, manufacturing by Hunter.

c. All heads will be installed with swing joints. Sprinkler head swing joints are to be factory assembled PVC swing joints constructed of 315-psi pressure rated materials. Swing joints shall be three-elbow construction with pre-lubricated buttress threaded connections and double O-Ring seals.

Sprinkler head swing joints shall be manufactured by Spears Manufacturing Company, Sylmar, California.

8. Installation Heads; Rotary, Spray, Swing Joints:

Sprinkler heads shall be installed flush and level with existing grades. Where sprinkler heads are installed along curbs or sidewalks, heads are to be placed 4 inches from the curb or sidewalk to allow for mechanized trimming. Where sprinkler heads are installed in plant beds, the sprinkler heads must be installed 2 inches from the edge of the planter wall. Soil around sprinkler head shall be tightly compacted.

All lines are to be flushed clean of debris prior to the installation of sprinkler head. Sprinkler heads and spray arcs are to be adjusted so that spray does not encroach into roadways or wet buildings and other structures.

9. Quick Couple Valves:

Quick Couple Valves shall be 1 inch with one-piece body construction from heavy cast bronze.

Quick Couple Valves shall be model QCV100N manufactured by Storm irrigation Products, or approved equivalent.

Two quick Coupler Keys shall be provided. The keys shall be one (1) inch single lug coupler made from heavy cast bronze.

Quick Couple Keys shall be model C-100 with hose swivel model HS100 manufactured by Storm irrigation Products, or approved equivalent.

10. Installation of Quick Couple Valves:

Quick coupler valves are to be installed plumb in a 10 inch round valve box (see Valve Box for product) The quick coupler valves are to be secured with a 36 inch x 5/8 inch epoxy coated steel rebar driven into stable ground. The quick coupler valve and rebar are to be secured together with three separate heavy duty stainless hose clamps. All quick coupler valves shall be mounted on a prefabricated triple swing joint assembly.

The swing joint assembly shall be model 5806-01-012 manufactured by Spears Manufacturing Company, or approved equivalent.

11. <u>Control Wiring:</u>

The irrigation control wire shall be a minimum of 14 gauge, single conductor, low energy circuit cable. A single 12-gauge single conductor white control wire shall be utilized as the common wire and connected in series to each valve. Zone wire shall be red, yellow, or orange in color. Irrigation Control Wire shall be a 14 gauge minimum PVC jacketed, single conductor, 600 volt rated, low energy direct burial circuit cable. The irrigation control wire shall be UL listed.

Irrigation control wiring shall be manufactured by Paige Electric Company, Union New Jersey, or approved equivalent.

12. Installation of Control Wiring:

Every other solenoid valve should have a spare control wire running from the irrigation controller. The spare wires should be marked at both termination points. The irrigation control wires are to be bundled and taped together at five-foot intervals. An expansion loop shall be provided every 100 feet, at every 90-degree angle, and at each valve location. Where irrigation control wiring is installed by itself, the minimum depth of cover shall be 24 inches. Under no circumstance shall the control wires be pulled through the ground. If a vibratory plow is utilized to install control wire, the plow must be used with a wire or cable-laying blade, which allows for cable installation without pulling the wire through the ground.

Splicing is not permissible unless approved on the shop drawings. If splicing has been approved all splices shall be waterproof. Should splices be required other than at valve locations, those splices must be installed in a valve box and noted on the As Built Plans. Under no circumstances shall splices be buried.

Splice Kits shall be Scotch DBY Direct Bury Splice Kit as manufactured by Electric Products Division/3M, St. Paul, MN.

13. Valve Boxes:

Valve Access Boxes shall be constructed of a combination of polyolefin and fibrous inorganic components (Superflexon Plastic) which is chemically inert and normally unaffected by moisture, corrosion and the effects of temperature change. Valve Boxes shall have a tensile strength of 3,400 psi.

For the automatic control valves, the Valve Box Base shall be #170101 and Valve Box Lid shall be #17314 as manufactured by Ametek Plymouth Products Division, Sheboygan, Wisconsin, or approved equivalent.

For the quick couple valves, the Valve Box shall be Model #181014 as manufactured by Ametek Plymouth Products Division, Sheboygen, Wisconsin, or approved equivalent.

The lids and boxes shall be green for turfed areas and brown for mulched areas.

14. Installation of Valve Boxes:

Each automatic control valve shall be installed in a valve box. A minimum of two valve boxes shall be stacked. The valve boxes shall be installed so that the valve is centered in the box allowing sufficient room for servicing of the valves. Clearance between the highest part of the valve and the bottom of the valve box lid shall be 2 inch minimum. The lid must not be too deep for convenient service. The valve box must not rest on the pipe. Clearance between the top of the piping and the bottom of the valve box shall be a minimum of 1 inch. Each valve box is to be installed flush and plumb to grade.

As a part of the valve box installation 3 to 4 inches of ½ to 1 inch stone, free of fines should be placed so that the top of the stone is 2" below the valve.

15. Drip Lines:

The drip system shall include all necessary components for a drip system. Such as, filter for solenoid, drip tubing, check valves, air vacuum relief valve, lateral piping, line flush valve and fittings.

The drip tubing is to have a root barrier which makes it resistant to root intrusion. The drip tubing is to be Netafim Techline pipe with a dripper flow rate of 0.9 GPH part # TLDL 9-1210 with 12 inch on center spacing for the drippers.

16. <u>Drip Lines Installation:</u>

The drip tubing will be installed in rows 12 to 16 inches apart. The rows closest to the walls of the landscaped planter shall be 2 to 4 inches from the edge of the walls. The drip tubing shall be laid on the finished grade of the soil mixture. The drip tubing must be secured a minimum of every 3 feet with Techline Staples (TLS6). The drip tubing must be installed parallel to the longest wall of the landscaped planter. If the drip tubing needs to go around a plant or obstacle, the tubing must return to its original line as soon as possible. The installation must be complete prior to mulch installation.

When possible the system shall use a center feed layout. The drip tubing shall feed from a PVC or Polyethylene supply header in a grid layout. The exhaust header and the supply header shall form a continuous loop with PVC or Polyethylene piping. The maximum distance between each supply header and exhaust header is 70 feet. The furthest distance in each direction of the solenoid valve shall contain a Netafim Line Flushing Valve, model TLFV-1, or approved equivalent. The flush valve will be below grade in a valve box with a sump. A filter shall be installed down stream of the solenoid valve with the appropriate filter mesh in accordance with Techline design manual. An air vacuum relief valve is to be installed at the highest points of each zone. The air vacuum relief valve is to be installed in a valve box. A single micro-spray head is required for each zone. The spray head is required to indicate that a zone is on and working. It should not be used as a main watering source for an area.

In situations where the slope is greater than or equal to 4% install the drip tubing perpendicular to the slope. Check valves must be installed to prevent water from draining to the lower elevations.

Hydrostatic Testing:

- A. The test shall consist of pressurizing the mainline piping system to a minimum of 150 psi for a period of four (4) hours.
- B. During the test, the piping system shall maintain 150 psi with an allowable pressure drop of not more that 5 psi, if any deficiencies in the piping system are found, the piping or fittings shall be repaired or replaced at no additional cost to the contract.

Pressure & Flow Testing:

- A. A test shall be taken of the static pressure on the upstream and downstream sides of the RPZ valve.
- B. A pressure reading shall be taken at each zone while each zone is running.
- C. The flow rate shall be recorded from the water meter at each running zone for a 5minute period.
- D. This information shall be recorded on the As-Built drawings.

As Built Drawings:

Upon completion of the installation the Contractor shall prepare and submit an "As-Built" drawing of the completed project. The drawings will show the accurate locations of all valves, quick couplers, mainline, wire splices, backflow devices, and controllers. The drawing shall also show the approximate location of sprinkler heads and lateral lines. Each controller shall be labeled on the plan alphabetically starting with A and the zones controlled by that controller shall be labeled A-1, A-2, A-3...etc.

The drawings must also show the locations of Water Service Components and Electrical Service Components.

Demonstration:

Demonstrate to Engineer's maintenance personnel operation of equipment, sprinklers, specialties, and accessories. Review operating and maintenance information. Provide 7 days notice to all parties in advance of each demonstration.

Method of Measurement: Irrigation system shall be measured per square yard of planted area.

<u>Basis of Payment</u>: IRRIGATION SYSTEM will be paid for at the contract unit price per square yard of planted area. Which price shall be payment in full for all labor, material, equipment, and services necessary for providing the landscape irrigation systems in a serviceable, fully operational manner, including, but not limited to, excavation, backfilling, sprinkler heads, solenoid control valves, isolation valves, valve boxes, automatic controls, system testing, owner personnel training, piping, equipment identification, plumbing permits, inspection fees, valve tags, charts, supports, sleeves, fittings, valves, and accessories.

IRRIGATION SYSTEM FALL SHUTDOWN IRRIGATION SYSTEM SPRING STARTUP

Description: The work to be performed under this item consists of placing the irrigation systems into operation (start-up) and preparing the irrigation systems for winter (shutdown) in accordance with the detailed specifications herein and generally accepted practices for operating, adjusting, and maintaining irrigation systems. This pay item does not include the initial start-up of the irrigation system. Initial start-up shall be included in the pay item **IRRIGATION SYSTEM per square yard.**

All work on the irrigation system shall be performed between April 1 and November 20 or as specified.

All plumbing work shall be done by licensed plumbers as per the applicable requirements of the <u>Chicago Building Code</u> and <u>Illinois Plumbing Code</u> (latest edition).

<u>General Requirements:</u> The Contractor shall coordinate all activities required for the completion of contract requirements with the Engineer's vendors, suppliers, all subcontractors, and CDOT personnel. The procedures described below represent the intended minimum requirements for irrigation system maintenance; however, the Contractor's design may require different or additional procedures. The Contractor shall submit his recommended maintenance procedures in similar detail for review and approval by the Engineer.

Irrigation Systems Fall Shut-Down (October 1st – 31st):

The Contractor shall prepare the entire irrigation system(s) for winter and protect its components against damage due to freezing or exposure.

Fall shut-down shall occur after October 1st and must be completed not later than October 31st. The following descriptions of work are minimum requirements applicable to all parts of the irrigation systems with the limits shown on the plans:

- 1. Full inspection as detailed in "Irrigation Systems Inspection" section.
- 2. Close valve in service line between city water main and water meter (supply side and discharge side). The piping drain valve downstream of the meter discharge valve shall remain closed and plugged at this time.
- 3. Open water outlets on ends of main piping to depressurize piping. Using the controller, activate each circuit to permit depressurization.
- 4. Remove the reduced pressure zone (RPZ) backflow preventer and prepare it for winter storage, including draining all water from the unit.
- 5. Provide compressed air (minimum one compressor 160 C.F.M.). Open each water outlet until all water and water vapor is released.
- 6. Carefully introduce compressed air into the water service line at the downstream (output) side of the RPZ. The Contractor shall provide any necessary special fittings for connection to the pipe flanges where the RPZ was removed.
- 7. Purge the water service line, the water supply pipe, and each circuit with compressed air. Purge each circuit for a minimum of five (5) minutes.

- 8. In the meter vault, remove the plug from the drain valve and open the drain valve to allow water in the water service line between the RPZ and the water meter to drain into the meter vault. Open the meter discharge side valve and allow water to drain from the water meter. Leave both the drain valve and the meter discharge valve open (until Spring Startup).
- 9. Remove all standing water from within the water meter vault. Record the water meter reading, serial number, and location.
- 10. Store RPZ units for the winter in a secured, frost-free storage facility. **Important:** RPZ units shall be reinstalled in the spring on the same water service lines from which they were removed in the Fall. After an RPZ is removed; record its serial number and location to facilitate reinstallation at the correct location in the spring.
- 11. Lubricate hinges and locks on all controller and RPZ cabinets.
- 12. Cover the exposed pipe connection fittings on RPZ units and water service lines with black or grey pipe caps. If caps are not available, the Contractor shall provide them at no additional cost to the contract. Covering the fitting with duct tape is not acceptable.

Any damage caused by improper or inadequate irrigation systems' fall shut-down shall be repaired immediately at the Contractor's expense.

Contractor is responsible for any equipment losses during winter storage. Cost of storage shall be included in the cost of this pay item.

The Contractor shall be responsible to complete and submit to the Engineer the Chicago Department of Transportation Division of Infrastructure Management Irrigation Shut Down Form included in these Special Provisions.

Irrigation Systems Spring Startup (April 1st – May 1st):

The Contractor shall place the entire irrigation system(s) into operation by reinstalling and/or reactivating, testing, operating, and adjusting applicable components of the irrigation systems including manual valves, meters, backflow preventers, and water outlets. Spring start-up may be performed after April 1st and must be completed not later than May 1st. This work includes, but is not limited to, the following activities:

- 1. Coordination of the start-up with the Plumbing Inspector-In-Charge, Department of Water Management, a minimum of 48 hours in advance of start-up on each irrigation system so the Department of Water Management can witness the annual testing and recertifying of the reduced pressure backflow preventors (RPZs) and reestablish service. Such testing and recertification of the backflow preventers shall be the responsibility of the Contractor. Illinois Plumbing and Backflow Testing Licenses are required. Any permits required from the Department of Water Management, to perform this work, shall be included in the cost of this pay item.
- 2. Coordination of pick-up and /or delivery of stored RPZ units with the CDOT storage facility and reinstallation of the RPZ units in the same locations from which they were removed.

- 3. Full inspection as detailed in the "Irrigation Systems Inspection" section.
- 4. Full mainline activation and pressurization of each zone and sub-zone in each irrigation system.
- 5. Flushing each mainline system at each end of each system for a minimum of 12 minutes at each end.
- 6. Flushing and testing each water outlet.
- 7. Verifying satisfactory activation of each solenoid valve. Inspecting of all wire connections within valve boxes related to these solenoid valves.
- 8. Inspecting and adjusting (if necessary) all wire connections within each Irrigation System Controller.
- 9. Verifying satisfactory operation of all functions of each controller. Replacing any batteries each Spring. Placing the Spring program into the controller.
- 10. Testing the operation of each moisture sensor. If moisture conditions do not allow testing, a thorough soaking of the sensor area will be necessary. Placing sensor in active and then in bypass modes to test each operation.
- 11. Closing and then opening each isolation valve.
- 12. Lubricating hinges and locks on all controller and RPZ cabinets.
- 13. Testing and tagging each RPZ.
- 14. Re-compacting soil within valve box of each water outlet. Additionally, the Contractor shall verify that the concrete pads for valves or control boxes have compacted soil under them; not just mulch. If necessary, soil shall be placed completely under the pads to ensure continuing proper support and avoidance of stress loads on attached water lines or conduits.
- 15. Observing for visual evidence of water leaks.
- 16. Submitting a field report to the Engineer, the following day after each inspection/spring turn-on, as an overview of each system's operation, performance and required repairs.

Irrigation Systems Inspection: The Contractor shall perform an Irrigation System Inspection once during the spring startup between April 1st and May 1^{st.} The inspection shall be considered included in the Contract Unit Price for Irrigation Systems Startup. The Contractor shall notify the Engineer 48 hour prior to any inspections.

Inspection shall be performed while the system is in operation. Each inspection shall include the following activities:

- a. Testing all zones. Verify each manual water outlet valve's operation.
- b. Cleaning clogged manual water outlets.
- c. Trimming plants and grass around manual water outlets and valve boxes as required.
- d. Testing each entire system for overall performance.
- e. Observing for visual evidence of water leaks.
- f. Making all necessary adjustments.
- g. Submitting a written field report to the Engineer the following day after each inspection, including an overview of the system's operation and performance. Identifying any items requiring repairs.

Any damage caused by improper or inadequate irrigation systems' start-up shall be repaired immediately at the Contractor's expense.

The Contractor shall be responsible to complete and submit to the Engineer the Chicago Department of Transportation Division of Infrastructure Management Irrigation Start-Up Form included in these Special Provisions.

Syringing Plants/Flushing Beds (April 1st – May 1st):

The objective of syringing (washing) plants and flushing beds is to reduce damage from winter salt.

In early spring, when temperatures are anticipated to remain above 35 degrees Fahrenheit for a minimum of 24 hours and the threat of snowfall and road salting has diminished, the Contractor shall wash all plant material with a gentle spray of water to remove accumulated salt from stems, bark and crowns. The Contractor shall be responsible for supplying the water.

Between April 1st and May 1st, after irrigation system start-up, apply water at double the normal rate for a period of one (1) week to flush salts from mulch, beds and soil.

Syringing of plants and flushing of beds shall be included on a Median Maintenance Report (see sample form at end of this section) which shall be submitted to the Engineer. This report shall be faxed or delivered to CDOT personnel. If the Median Maintenance Report is not received, it will be assumed that no work was performed and no payment will be made.

Syringing the plants and flushing the beds at irrigated medians shall be considered incidental to IRRIGATION SYSTEMS SPRING STARTUP.

Any lane closures required to perform any of this work shall be done in accordance with Section 701 of the Standard Specifications and as stated under Traffic Control and Protection. Traffic Control and Protection shall no be paid for separately, but shall be considered incidental to this pay item.

<u>Method of Measurement</u>: Irrigation Systems Fall Shutdown and Irrigation System Spring Startup shall be measured per each for each Backflow Preventer (RPZ).

Basis of Payment:

Irrigation Systems Fall Shutdown: This item shall be paid for at the contract price per each for IRRIGATION SYSTEMS FALL SHUTDOWN which price shall include all materials, equipment, storage, and labor to complete the work specified herein for the period starting after October 1st and completing not later than October 31st.

Irrigation Systems Spring Startup: This item shall be paid for at the contract price per each for IRRIGATION SYSTEMS SPRING STARTUP which price shall include all materials, equipment, and labor to complete the work specified herein for the period starting after April 1st and completing not later than May 1st.

PLANTING PERENNIAL PLANTS

Delete Article 254.04(a) Planting Time and substitute the following:

Bulbs shall be planted between October 15 and November 15.

Delete Article 254.04(b) Planting Time and substitute the following:

Ornamental Herbaceous Plants and Prairie Type Plants shall be planted either between May 1 and June 15 or between August 15 and September 30th.

Delete Article 254.06 Layout of Planting and substitute the following:

When plants are specified to be planted in prepared soil planting beds, the planting bed shall be approved by the Engineer prior to planting. The Contractor shall be responsible for all plant layout. The layout must be performed by qualified personnel. The planting locations must be laid out as shown in the landscape plan. This will require the use of an engineer's scale to determine some dimensions. Bed limits must be painted. The Engineer will contact the Roadside Development Unit at (847) 705-4171 to approve the layout prior to installation. Allow a minimum of seven (7) days prior to installation for approval.

Add the following to Article 254.07 Planting Procedures:

When planting perennials in bed areas shown on the plans or as directed by the Engineer, the following work shall be performed prior to planting:

- All existing turf shall be cut out one (1) inch below the existing soil line, and disposed of as specified in Article 202.03.
- Spade a planting bed edge at approximately a 45 degree angle and to a depth of approximately three (3) inches around the perimeter of the perennial bed. Remove any debris created in the spade edging process and dispose of as specified in Article 202.03.
- Prepare soil surface by gently loosening the top six (6) inches of the existing soil.
- Do not plant when soil is muddy.
- No plant material shall be installed before below-ground irrigation system components have been installed and are operational.
- Trees must be installed first to establish proper layout and to avoid damage to other plantings.
- Perennial plants shall be planted by a hand method approved by the Engineer. Open holes sized to accommodate roots, place plants at proper elevation and backfill with planting soil, working carefully to avoid damage to roots and to leave no voids. Build up a small water basin of soil around each plant.

• Immediately after planting, thoroughly water plant beds. Do not wash soil onto crowns of plants.

Delete the first sentence of Article 254.08 Mulching and substitute the following:

Within 24 hours, the entire perennial plant bed shall be mulched with two (2) inches of fine grade Shredded Hardwood Bark Mulch. Hardwood bark mulch shall be clean, finely shredded mixed-hardwood bark not to exceed two (2) inches in its largest dimension, free of foreign matter, sticks, stones, and clods. All hardwood mulch shall be processed through a hammer mill. Hardwood bark not processed through a hammer mill. Hardwood bark not processed through a hammer mill shall not be accepted. A sample and request for material inspection form must be supplied to the Engineer for approval prior to performing any work. Care shall be taken to place the mulch so as not to smother the plants or bury leaves, stems or vines under mulch material.

Add the following to Article 254.08 Mulching:

Pre-emergent Herbicide shall be used in the perennial beds after the placement of mulch. See specification for Weed Control, Pre-emergent Herbicide.

Delete Article 254.09 (b) Period of Establishment and substitute the following:

Perennial plants must undergo a 30-day period of establishment. Additional watering shall be performed not less than twice a week for four weeks following installation. If the irrigation system is not able to provide enough water to establish the plants, the Contractor will provide supplemental watering at no additional charge. Water shall be applied at the rate of 2 gallons per square foot. Should excess moisture prevail, the Engineer may delete any or all of the additional watering cycles. In severe weather, the Engineer may require additional watering.

A spray nozzle that does not damage small plants must be used when watering perennial plants. Water shall be applied at the base of the plant to keep as much water as possible off plant leaves. Watering of plants in beds shall be applied in such a manner that all plant holes are uniformly saturated without allowing water to flow beyond the periphery of the bed. The plants to be watered and the method of application will be approved by the Engineer. The Contractor will not be relieved in any way from the responsibility for unsatisfactory plants due to the amount of watering.

Add the following Article 254.09 Period of Establishment:

During the period of establishment, weeds and grass growth shall be removed from within the mulched perennial beds. This weeding shall be performed a minimum of once per week or within 48 hours following notification by the Engineer during the 30 day period of establishment. The Contractor will not be relieved in any way from the responsibility for unsatisfactory plants due to the extent of weeding.

The weeding may be performed in any manner approved by the Engineer provided the weed and grass growth, including their roots and stems, are removed from the area

specified. Mulch disturbed by the weeding operation shall be replaced to its original condition. All debris that results from this operation must be removed from the right-of-way and disposed of at the end of each day in accordance with Article 202.03.

Add the following to Article 254.10 Method of Measurement:

- a) Disposal of sod and debris (rock, stones, concrete, bottles, plastic bags, etc.) removed from the perennial planting bed as specified in Article 202.03.
- b) Soil Conditioner will be measured for payment as specified in Soil Conditioner.

Add the following to Article 254.11 Basis of Payment:

- a) Pre-emergent Herbicide will be paid for as specified in Weed Control, Pre-emergent Herbicide.
- b) Payment for Shredded Mulch shall be included in contract unit price of the perennial plant pay item.
- c) The unit price shall include the cost of all materials, equipment, labor, plant care, removal, disposal and incidentals required to complete the work as specified herein and to the satisfaction of the Engineer.

PLANTING WOODY PLANTS

This work shall consist of planting woody plants as specified in Section 253 of the Standard Specifications with the following revisions:

Delete Article 253.03 Planting Time and substitute the following:

Spring Planting. This work shall be performed between March 15th and May 31st except that evergreen planting shall be performed between March 15th and April 30th in the northern zone.

Add the following to Article 253.03 (a) (2):

All plants shall be obtained from Illinois Nurserymen's Association or appropriate state chapter nurseries. All trees and shrubs shall be dug prior to leafing out (bud break) in the spring or when plants have gone dormant in the fall, except for the following species which are only to be dug prior to leafing out in the spring:

- Serviceberry (Amelanchier spp.)
- Hawthorn (Crataegus spp.)
- Seven Son Flower (Heptacodium miconoides)
- Crabapple (Malus spp.)
- Oak (Quercus spp.)
- Chicago Blues Black Locust (Robinia pseudoacacia 'Chicago Blues')

Fall Planting. This work shall be performed between August 15th and September 30th except that evergreen planting shall be performed between August 15th and October 15th.

Planting dates are dependent on species of plant material and weather. Planting might begin or end prior or after above dates as approved by the Engineer. Do not plant when soil is muddy or during frost. No plant material shall be installed prior to the final grade of the planting soil. No plant material shall be installed before below-ground irrigation system components have been installed and operational. Trees must be installed first to establish proper layout and to avoid damage to other plantings.

All plant material not planted according to the specified seasonal date shall require prior written approval from the Engineer. Failure to secure such approval shall result in the rejection of the plant material and replacement at no additional cost to the Department.

Add the following to Article 253.05 Transportation:

Cover plants during transport. Plant material transported without cover shall be automatically rejected.

Delete the third sentence of Article 253.07 and substitute the following:

The Contractor shall be responsible for all plant layout. The layout must be performed by qualified personnel. The planting locations must be laid out as shown in the landscape plan. This will require the use of an engineer's scale to determine some dimensions. The tree locations must be marked by staking, and bed limits must be painted. The Engineer will contact the Roadside Development Unit at (847) 705-4171 to approve the layout prior to installation. Allow a minimum of seven (7) days prior to installation for approval.

Delete Article 253.08 Excavation of Plant Holes and substitute the following:

Protect structures, utilities, sidewalks, knee walls, fences, pavements, utility boxes, other facilities, lawns and existing plants from damage caused by planting operations.

Holes for trees shall be dug at the location indicated by the marking stakes. Holes for shrubs shall be dug within the marked outline of the planting bed. The spacing of plants will be designated on the plans. Spacing shall be measured form center-to-center, and alternate rows shall be staggered.

Excavate with sides vertical, bottom flat but with high center for drainage. Deglaze sides and loosen bottom. The diameter of the hole shall be 1 foot wider than the root spread. The depth of the hole shall be such that the top of the root ball is 2 to 3 inches above finished grade (allow for settling). Remove all excavated subsoil from the site and dispose as specified in Article 202.03. The excavated material shall not be stockpiled on turf or in ditches.

Delete the third and fourth paragraphs of Article 253.10 Planting Procedures and Article 253.10 (a) and substitute the following:

Trees, shrubs, and vines shall be thoroughly watered with a method approved by the Engineer. Approved watering equipment shall be at the site of the work and in operational condition PRIOR TO STARTING the planting operation and DURING all planting operations OR PLANTING WILL NOT BE ALLOWED.

Set plants in the excavated hole with top of ball 2 to 3 inches above finished grade. Add soil as required under ball to achieve plumb. Untie all cords binding burlap to trunk. Remove all burlap and wire baskets from top 1/3 of the root ball. Where rocks, gravel, heavy clay or other debris are encountered, clean top soil shall be used. Do not backfill excavation with subsoil.

Place backfill in 6 inch-thick layers. Work each layer by hand to compact backfill and eliminate voids. Maintain plumb during backfilling. When backfill is approximately 2/3 complete, saturate backfill with water and repeat until no more water can be absorbed. Place and compact remainder of backfill and thoroughly water again.

Add the following to Article 253.10 Planting Procedures:

Where directed by the Engineer, add a mycorrhizae inoculant at the time of planting according to the manufacturer's specifications. When required the mycorrhizae inoculant will be provided by IDOT.

Delete Article 253.11 and substitute the following:

Within 48 hours after planting, mulch shall be placed around all plants in the entire mulched bed or saucer area specified to a depth of 4 inches (100 mm). No weed barrier fabric will be required for tree and shrub planting. Pre-emergent Herbicide will be used instead of weed barrier fabric. The Pre-emergent Herbicide shall be applied after mulching. See specification for Weed Control, Pre-Emergent Herbicide.

Hardwood bark mulch shall be clean, finely shredded mixed-hardwood bark not to exceed two (2) inches in its largest dimension, free of foreign matter, sticks, stones, and clods. All hardwood mulch shall be processed through a hammer mill. Hardwood bark not processed through a hammer mill shall not be accepted. A sample and request for material inspection form must be supplied to the Engineer for approval prior to performing any work.

Care shall be taken not to bury leaves, stems, or vines under mulch material. Mulch shall not be in contact with the base of the trunk. All finished mulch areas shall be left smooth and level to maintain uniform surface and appearance. After the mulch placement, any debris or piles of material shall be immediately removed from the right of way, including raking excess mulch out of turf areas.

Delete Article 253.12 Wrapping and substitute the following:

Any paper or cardboard trunk wrap must be removed before placing the tree in the tree hole in order to inspect the condition of the trunks. Within 24 hours, "A layer of commercial screen wire mesh shall be wrapped around the trunk of all deciduous trees. All other plants planted individually shall be similarly wrapped when directed by the Engineer. The screen wire shall be secured to itself with staples or single wire strands tied to the mesh. Trees shall be wrapped at time of planting, before the installation of mulch. The lower edge of the screen wire shall be in continuous contact with the ground and shall extend up to the lowest major branch.

Add the following to Article 253.13 Bracing:

Trees required to be braced shall be braced within 24 hours of planting.

Add the following to the first paragraph of Article 253.14 Period of Establishment:

Prior to being accepted, the plants shall endure a period of establishment. This period shall begin in June and end in September of the same year.

Add the following to the third paragraph of Article 253.14 Period of Establishment:

Failure to replace plant material within the time allowed will result in liquidated damages being applied in the amount of \$250.00 per item per day.

Delete Article 253.17 Basis of Payment and substitute the following:

This work will be paid for 75% of the contract unit price each for several kinds and sizes of trees and shrubs found to be a live and healthy condition by May 31st, as specified in Article 253.14. The remaining 25% of the contract unit price each will be paid for after the successful completion of all required replacement plantings and clean up work and receipt of the "Final Acceptance of Landscape Work" memorandum from the Bureau of Maintenance. The unit price shall include the cost of all material, equipment, labor, plant care, disposal and incidental required to complete the work as specified herein and to the satisfaction of the Engineer. The placement of Pre-emergent Herbicide shall be paid for at the contract unit price for WEED CONTROL, PRE-EMERGENT HERBICIDE.

WEED CONTROL, PRE-EMERGENT HERBICIDE

<u>Description</u>: This work shall consist of spraying a pre-emergent herbicide in areas as shown on the plans or as directed by the Engineer. This item will be used in all tree beds/ mulch rings, shrub beds and perennial beds.

<u>Materials</u>: The pre-emergent herbicide (Pendulum® AquaCap[™] or equivalent) shall have the following formulation:

A. Active Ingredient *Pendimethalin, N-(1-ethylproply)-3,4-dime	thyl-2,	
6-dinitrobenzenamine		38.7%
B. Inert Ingredients:		<u>_61.3%</u>
	TOTAL	100.0%

The Contractor shall submit a certificate to the Engineer for approval, including the following, at least seventy-two (72) hours prior to starting work:

- 1. The chemical names of the compound and the percentage by volume of the ingredients which must match the above specified formulation.
- 2. A statement that the material is in a solution which will form a satisfactory emulsion for use when diluted with water for normal spraying conditions.
- 3. A statement that the Pendulum® AquaCap[™] or equal, when mixed with water, will be completely soluble and dispersible and remain in suspension with continuous agitation.
- 4. A statement describing the products proposed for use when the manufacturer of Pendulum® AquaCap[™] or equal requires that surfactants, drift control agents, or other additives be used with the product. These tank mix additives shall be used as specified by the manufacturer. Required additives will not be paid for separately.

All material shall be brought to the spray area in the original, unopened containers supplied by the manufacturer.

<u>Schedule</u>: Spraying will not be allowed when temperatures exceed 90°F or under 60°F, when wind velocities exceed ten (10) miles per hour, when foliage is wet or rain is eminent, when visibility is poor or during legal holiday periods.

Application Rate: Apply the herbicide at the rate of 1 gallons/acre (9.4 L/ha).

One (1) gallon of Pendulum® AquaCap[™] or equal formulation shall be diluted with one hundred (100) gallons of water and applied as a mixture. Water for dilution of the mixture will not be paid for separately.

<u>Method:</u> The pre-emergent herbicide shall be used in accordance with the manufacturer's directions on the package. The herbicide is to be applied within three days after completing PLANT CARE and the perennial, shrub and/or vine bed will not be disturbed thereafter.

Uniformly apply with properly calibrated ground equipment in sufficient water per acre to uniformly treat the area with a spray pressure of 25 to 50 psi. Maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that will increase rates above those recommended.

<u>Method of Measurement</u>: Pre-emergent herbicide will be measured in place in Gallons (Liters) of Pre-emergent Herbicide applied.

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<u>Basis of Payment</u>: This work will be paid for at the contract unit price per gallon (liters) of WEED CONTROL, PRE-EMERGENT HERBICIDE. Water for dilution of the mixture and additives required for application will not be paid for as separate items, but the costs shall be considered as included in the contract unit price for WEED CONTROL, PRE-EMERGENT HERBICIDE, and no additional compensation will be allowed.

ANTI-STRIP ADDITIVE FOR HMA (DISTRICT ONE)

Effective: May 1, 2007

Revised: January 24, 2008

Revise the first paragraph of Article 1030.04(c) of the Standard Specifications to read:

"(c) Determination of Need for Anti-Stripping Additive. The Engineer will determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to Illinois Modified AASHTO T 283. To be considered acceptable by the Department as a mixture not susceptible to stripping, the conditioned to unconditioned tensile strength ratio (TSR) shall be equal to or greater than 0.85 for 6 in. (150 mm) specimens. Mixtures, either with or without an additive, with TSRs less than 0.85 for 6 in. (150 mm) specimens will be considered unacceptable."

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

"If an anti-stripping additive is required for any HMA, the cost of the additive and the cost incurred in introducing the additive into the HMA will not be paid for separately, but shall be considered as included in the contract unit price for the HMA item involved.

FINE AGGREGATE FOR HOT-MIX ASPHALT (HMA) (DISTRICT ONE)

Effective: May 1, 2007

Revise Article 1003.03 (c) to read:

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

TEMPERATURE CONTROL FOR CONCRETE PLACEMENT (DISTRICT ONE)

Effective: May 1, 2007

Delete the second and third sentences of the second paragraph of Article 1020.14(a) of the Standard Specifications.

RECLAIMED ASPHALT PAVEMENT (RAP) (DISTRICT ONE)

Effective: January 1, 2007

Revised: January 24, 2008

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	\pm 0.4 % ^{1/}	± 0.5 %
G _{mm}	\pm 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.

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

Max RAP Percentage

- 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 PG58-22).

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) Accumualted 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."

ALKALI-SILICA REACTION FOR CAST-IN-PLACE CONCRETE (BDE)

Effective: August 1, 2007

<u>Description</u>. This special provision is intended to reduce the risk of a deleterious alkali-silica reaction in concrete exposed to humid or wet conditions. The special provision is not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate or sodium formate. The special provision shall not apply to the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy. The special provision shall also not apply to precast products or precast prestressed products.

<u>Aggregate Expansion Values</u>. Each coarse and fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List.

The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates and 0.03 percent to limestone or dolomite fine aggregates (manufactured stone sand); however the Department reserves the right to perform the ASTM C 1260 test.

<u>Aggregate Groups</u>. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

AGGREGATE GROUPS			
Coarse Aggregate	Fine Aggregate		
or Coarse Aggregate Blend	or Fine Aggregate Blend		
ASTM C 1260 Expansion	ASTM C 1260 Expansion		
	≤ 0.16% > 0.16% - 0.27% > 0.27%		
≤ 0.16%	Group I Group II Group II		Group III
> 0.16% - 0.27%	Group II Group II Group III		Group III
> 0.27%	Group III Group III Group IV		Group IV

<u>Mixture Options</u>. Based upon the aggregate group, the following mixture options shall be used; however, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

- Group I Mixture options are not applicable. Use any cement or finely divided mineral.
- Group II Mixture options 1, 2, 3, 4, or 5 shall be used.
- Group III Mixture options 1, 2 and 3 combined, 4, or 5 shall be used.
- Group IV Mixture options 1, 2 and 4 combined, or 5 shall be used.

For Class PP-3 concrete the mixture options are not applicable, and any cement may be used with the specified finely divided minerals.

a) Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value = $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + \dots$

Where: a, b, c... = percentage of aggregate in the blend; A, B, C...= expansion value for that aggregate.

b) Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. The replacement ratio is defined as "finely divided mineral:portland cement".

- 1) Class F Fly Ash. For Class PV, BS, MS, DS, SC, and SI concrete and cement aggregate mixture II (CAM II), Class F fly ash shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.
- 2) Class C Fly Ash. For Class PV, MS, SC, and SI Concrete, Class C fly ash with 18 percent to less than 26.5 percent calcium oxide content, and less than 2.0 percent loss on ignition, shall replace 20 percent of the portland cement at a minimum replacement ratio of 1:1; or at a minimum replacement ratio of 1.25:1 if the loss on ignition is 2.0 percent or greater. Class C fly ash with less than 18 percent calcium oxide content shall replace 20 percent of the portland cement at a minimum replacement ratio of 1.25:1.

For Class PP-1, RR, BS, and DS concrete and CAM II, Class C fly ash with less than 26.5 percent calcium oxide content shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.

3) Ground Granulated Blast-Furnace Slag. For Class PV, BS, MS, SI, DS, and SC concrete, ground granulated blast-furnace slag shall replace 25 percent of the portland cement at a minimum replacement ratio of 1:1.

For Class PP-1 and RR concrete, ground granulated blast-furnace slag shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.

For Class PP-2, ground granulated blast-furnace slag shall replace 25 to 30 percent of the portland cement at a minimum replacement ratio of 1:1.

- 4) Microsilica or High Reactivity Metakaolin. Microsilica solids or high reactivity metakaolin shall be added to the mixture at a minimum 25 lb/cu yd (15 kg/cu m) or 27 lb/cu yd (16 kg/cu m) respectively.
- c) Mixture Option 3. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.60 percent. When aggregate in Group II is involved, any finely divided mineral may be used with a portland cement.
- d) Mixture Option 4. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.45 percent. When aggregate in Group II or III is involved, any finely divided mineral may be used with a portland cement.
- e) Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is ≤ 0.16 percent when performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly. For latex concrete, the ASTM C 1567 test shall be performed without the latex. The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content $(Na_2O + 0.658K_2O)$, a new ASTM C 1567 test will not be required.

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<u>Testing</u>. If an individual aggregate has an ASTM C 1260 expansion value > 0.16 percent, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The ASTM C 1293 test shall be performed with Type I or II cement having a total equivalent alkali content (Na₂O + 0.658K₂O) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper. If the testing laboratory desires to use an alternate container or wick of absorbent material, ASTM C 1293 test results with an alkalireactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 or 1567 test result. The Engineer will not accept the result if the precision and bias for the test methods are not met.

The laboratory performing the ASTM C 1567 test shall be inspected for Hydraulic Cement - Physical Tests by the Cement and Concrete Reference Laboratory (CCRL) and shall be approved by the Department. The laboratory performing the ASTM C 1293 test shall be inspected for Portland Cement Concrete by CCRL and shall be approved by the Department.

CEMENT (BDE)

Effective: January 1, 2007

Revised: November 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 not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

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 not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

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.

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

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

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

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

<u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform <u>4.0%</u> of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

(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.

<u>DBE LOCATOR REFERENCES</u>. 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.

<u>GOOD FAITH EFFORT PROCEDURES</u>. 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.

<u>CONTRACT COMPLIANCE</u>. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the 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 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.

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- (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

Revised: January 2, 2008

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 FHWA hourly rate from the "Equipment Watch Rental Rate Blue Book" (Blue Book) in effect when the force account work begins. The FHWA hourly rate is calculated as follows.

FHWA hourly rate = (monthly rate/176) x (model year adj.) x (Illinois adj.) + EOC

Where: EOC = Estimated Operating Costs per hour (from the Blue Book)

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 at the following hourly rate: $0.5 \times (FHWA \text{ hourly rate - EOC})$.

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."

HOT-MIX ASPHALT - FIELD VOIDS IN THE MINERAL AGGREGATE (BDE)

Effective: April 1, 2007

Revised: April 1, 2008

	Frequency of Tests	Frequency of Tests	Test Method
"Parameter			See Manual of Test
	High ESAL Mixture	All Other Mixtures	Procedures for Materials
	Low ESAL Mixture		
VMA	Day's production	N/A	Illinois-Modified
	≥ 1200 tons:		AASHTO R 35
	1 per half day of		
Note 5.	production		
	Day's production		
	< 1200 tons:		
	1 per half day of		
	production for first		
	2 days and 1 per day		
	thereafter (first sample		
	of the day)		

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

Note 5. The G_{sb} used in the voids in the mineral aggregate (VMA) calculation shall be the same average G_{sb} value listed in the mix design."

Add the following to the Control Limits table in Article 1030.05(d)(4) of the Standard Specifications:

"CONTROL LIMITS			
Parameter	High ESAL Low ESAL	High ESAL Low ESAL	All Other
	Individual Test	Moving Avg. of 4	Individual Test
VMA	-0.7 % ^{2/}	-0.5 % ^{2/}	N/A

2/ Allowable limit below minimum design VMA requirement"

Add the following to the table in Article 1030.05(d)(5) of the Standard Specifications:

"CONTROL CHART REQUIREMENTS	High ESAL Low ESAL	All Other
	VMA"	

Revise the heading of Article 1030.05(d)(6)a.1. of the Standard Specifications to read:

"1. Voids, VMA, and Asphalt Binder Content."

Revise the first sentence of the first paragraph of Article 1030.05(d)(6)a.1.(a.) of the Standard Specifications to read:

"If the retest for voids, VMA, or asphalt binder content exceeds control limits, HMA production shall cease and immediate corrective action shall be instituted by the Contractor."

Revise the table in Article 1030.05(e) of the Standard Specifications to read:

"Test Parameter	Acceptable Limits of Precision
% Passing: ^{1/}	
1/2 in. (12.5 mm)	5.0 %
No. 4 (4.75 mm)	5.0 %
No. 8 (2.36 mm)	3.0 %
No. 30 (600 μm)	2.0 %
Total Dust Content No. 200 (75 μm) ^{1/}	2.2 %
Asphalt Binder Content	0.3 %
Maximum Specific Gravity of Mixture	0.026
Bulk Specific Gravity	0.030
VMA	1.4 %
Density (% Compaction)	1.0 % (Correlated)

1/ Based on washed ignition."

HOT-MIX ASPHALT – PLANT TEST FREQUENCY (BDE) Effective: April 1, 2008

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

						
	Frequency of Tests	Frequency of Tests	Test Method See Manual of Test			
"Parameter	High ESAL Mixture Low ESAL Mixture	All Other Mixtures	Procedures for Materials			
Aggregate Gradation		A 1.0 1				
Hot bins for batch and continuous plants.	1 dry gradation per day of production (either morning or afternoon sample).	1 gradation per day of production. The first day of production shall be a	Illinois Procedure			
Individual cold-feed or combined belt- feed for drier drum plants.	and 1 washed ignition oven test on the mix per day of production (conduct in the	washed ignition oven test on the mix. Thereafter, the testing shall alternate between				
% passing sieves: 1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 μm) No. 200 (75 μm)	afternoon if dry gradation is conducted in the morning or vice versa).	dry gradation and washed ignition oven test on the mix. Note 4.				
Note 1.	Note 3. Note 4.					
Asphalt Binder Content by Ignition Oven	1 per half day of production	1 per day	Illinois-Modified AASHTO T 308			
Note 2.						
Air Voids	Day's production ≥ 1200 tons:		Illinois-Modified AASHTO T 312			
Bulk Specific Gravity of Gyratory Sample	1 per half day of production	1 per day				
	Day's production < 1200 tons:					
	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)					
Maximum Specific Gravity of Mixture	Day's production ≥ 1200 tons:	1 per day	Illinois-Modified AASHTO T 209"			
	1 per half day of production					
	Day's production < 1200 tons:					
	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)					

HOT-MIX ASPHALT – TRANSPORTATION (BDE)

Effective: April 1, 2008

Revise Article 1030.08 of the Standard Specifications to read:

"**1030.08 Transportation.** Vehicles used in transporting HMA shall have clean and tight beds. The beds shall be sprayed with asphalt release agents from the Department's approved list. In lieu of a release agent, the Contractor may use a light spray of water with a light scatter of manufactured sand (FA 20 or FA 21) evenly distributed over the bed of the vehicle. After spraying, the bed of the vehicle shall be in a completely raised position and it shall remain in this position until all excess asphalt release agent or water has been drained.

When the air temperature is below 60 °F (15 °C), the bed, including the end, endgate, sides and bottom shall be insulated with fiberboard, plywood or other approved insulating material and shall have a thickness of not less than 3/4 in (20 mm). When the insulation is placed inside the bed, the insulation shall be covered with sheet steel approved by the Engineer. Each vehicle shall be equipped with a cover of canvas or other suitable material meeting the approval of the Engineer which shall be used if any one of the following conditions is present.

- (a) Ambient air temperature is below 60 °F (15 °C).
- (b) The weather is inclement.
- (c) The temperature of the HMA immediately behind the paver screed is below 250 °F (120 °C).

The cover shall extend down over the sides and ends of the bed for a distance of approximately 12 in. (300 mm) and shall be fastened securely. The covering shall be rolled back before the load is dumped into the finishing machine."

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.

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."

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 Fluorescent								
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."

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.

<u>Mix Design Submittal</u>. 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 selfconsolidating 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.

<u>Mixing Portland Cement Concrete</u>. 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."

<u>Quality Control by Contractor at Plant</u>. 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.

<u>Quality Control by Contractor at Jobsite</u>. 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.

<u>Quality Assurance by Engineer at Plant</u>. 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.

<u>Quality Assurance by Engineer at Jobsite</u>. 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.

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.

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 highgrade 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

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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.

х	0.490	0.475	0.485	0.530
у	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."

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.

"(c) Water Blaster with Vacuum Recovery1101.12"

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."

ILLINOIS DEPARTMENT OF LABOR

PREVAILING WAGES FOR COOK COUNTY EFFECTIVE APRIL 2008

The Prevailing rates of wages are included in the Contract proposals which are subject to Check Sheet #5 of the Supplemental Specifications and Recurring Special Provisions. The rates have been ascertained and certified by the Illinois Department of Labor for the locality in which the work is to be performed and for each craft or type of work or mechanic needed to execute the work of the Contract. As required by Prevailing Wage Act (820 ILCS 130/0.01, et seq.) and Check Sheet #5 of the Contract, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing work under the Contract. Post the scale of wages in a prominent and easily accessible place at the site of work.

If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at http://www.state.il.us/agency/idol/ or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.

Cook County Prevailing Wage for April 2008

Trade Name	RG	TYP (2	Base	FRMAN *M-F	- '>8	OSA	OSH	H/W	Pensn	Vac	Trng
========================	==	=== :	=	=====	===== ===	==	===	===	=====	=====	=====	=====
ASBESTOS ABT-GEN		ALL		33.150	33.650 1.5		1.5	2.0	7.970	5.680	0.000	0.220
ASBESTOS ABT-MEC		BLD		26.180	27.930 1.5	, ,	1.5	2.0	8.760	6.410	0.000	0.310
BOILERMAKER		BLD		39.450	43.000 2.0)	2.0	2.0	6.720	8.490	0.000	0.300
BRICK MASON		BLD		36.430	40.070 1.5		1.5	2.0	7.700	8.770	0.000	0.440
CARPENTER		ALL		37.770	39.770 1.5		1.5	2.0	8.960	6.910	0.000	0.490
CEMENT MASON		ALL		39.850	41.850 2.0					6.520		
CERAMIC TILE FNSHER		BLD		30.150	0.000 1.5					6.600		
COMM. ELECT.		BLD			36.440 1.5					5.590		
ELECTRIC PWR EQMT OP		ALL			43.450 1.5					10.77		
ELECTRIC PWR GRNDMAN		ALL			43.450 1.5					8.390		
ELECTRIC PWR LINEMAN		ALL			43.450 1.5					10.77		
ELECTRICIAN		ALL			40.400 1.5					7.650		
ELEVATOR CONSTRUCTOR		BLD			49.420 2.0 30.140 1.5					6.960 5.970		
FENCE ERECTOR GLAZIER		ALL BLD			34.500 1.5					10.15		
HT/FROST INSULATOR		BLD			39.150 1.5					10.13		
IRON WORKER		ALL			41.250 2.0					12.74		
LABORER		ALL			33.900 1.5					5.680		
LATHER		BLD			39.770 1.5					6.910		
MACHINIST		BLD			40.390 2.0					6.550		
MARBLE FINISHERS		ALL		27.680	0.000 1.5					8.770		
MARBLE MASON		BLD		36.430	40.070 1.5					8.770		
MATERIAL TESTER I		ALL		23.150	0.000 1.5		1.5	2.0	7.970	5.680	0.000	0.220
MATERIALS TESTER II		ALL		28.150	0.000 1.5	5	1.5	2.0	7.970	5.680	0.000	0.220
MILLWRIGHT		ALL		37.770	39.770 1.5		1.5	2.0	8.960	6.910	0.000	0.490
OPERATING ENGINEER		BLD 1	1	41.550	45.550 2.0)	2.0	2.0	6.850	5.600	1.900	0.700
OPERATING ENGINEER		BLD 2	2	40.250	45.550 2.0)	2.0	2.0	6.850	5.600	1.900	0.700
OPERATING ENGINEER		BLD (3	37.700	45.550 2.0)	2.0	2.0	6.850	5.600	1.900	0.700
OPERATING ENGINEER		BLD 4	4	35.950	45.550 2.0)	2.0	2.0	6.850	5.600	1.900	0.700
OPERATING ENGINEER					47.250 1.5					5.600		
OPERATING ENGINEER					47.250 1.5					5.600		
OPERATING ENGINEER					47.250 1.5					5.600		
OPERATING ENGINEER					47.250 1.5					5.600		
OPERATING ENGINEER					43.750 1.5					5.600		
OPERATING ENGINEER					43.750 1.5					5.600		
OPERATING ENGINEER					43.750 1.5 43.750 1.5					5.600		
OPERATING ENGINEER										5.600		
OPERATING ENGINEER ORNAMNTL IRON WORKER			C		43.750 1.5					5.600		
PAINTER		ALL ALL			39.600 2.0 39.820 1.5					12.09 7.400		
PAINTER SIGNS		BLD			32.520 1.5					2.310		
PILEDRIVER		ALL			39.770 1.5					6.910		
PIPEFITTER		BLD			42.000 1.5					7.550		
PLASTERER		BLD			38.270 1.5					7.740		
PLUMBER		BLD			43.000 1.5					5.560		
ROOFER		BLD			38.000 1.5					3.870		
SHEETMETAL WORKER		BLD			36.070 1.5					7.850		
SIGN HANGER		BLD			27.360 1.5					2.280		
SPRINKLER FITTER		BLD		40.500	42.500 1.5		1.5	2.0	8.500	6.850	0.000	0.500
STEEL ERECTOR		ALL		36.250	37.750 2.0)				10.77		
STONE MASON		BLD		36.430	40.070 1.5		1.5	2.0	7.700	8.770	0.000	0.440
TERRAZZO FINISHER		BLD		31.810	0.000 1.5					9.200		
TERRAZZO MASON		BLD			38.390 1.5					10.05		
TILE MASON		BLD			40.630 1.5					7.850		
TRAFFIC SAFETY WRKR		HWY	_		25.900 1.5					1.875		
TRUCK DRIVER	Е				30.600 1.5					4.800		
TRUCK DRIVER	E				30.600 1.5					4.800		
TRUCK DRIVER	Ε	ALL .	3	30.400	30.600 1.5)	1.5	2.0	o.150	4.800	0.000	0.150

TRUCK DRIVER	Е	ALL 4	30.600	30.600	1.5	1.5	2.0	6.150	4.800	0.000	0.150
TRUCK DRIVER	W	ALL 1	30.950	31.500	1.5	1.5	2.0	6.500	3.950	0.000	0.000
TRUCK DRIVER	W	ALL 2	31.100	31.500	1.5	1.5	2.0	6.500	3.950	0.000	0.000
TRUCK DRIVER	W	ALL 3	31.300	31.500	1.5	1.5	2.0	6.500	3.950	0.000	0.000
TRUCK DRIVER	W	ALL 4	31.500	31.500	1.5	1.5	2.0	6.500	3.950	0.000	0.000
TUCKPOINTER		BLD	36.900	37.900	1.5	1.5	2.0	5.910	8.350	0.000	0.400

Legend:

M-F>8 (Overtime is required for any hour greater than 8 worked each day, Monday through Friday.

OSA (Overtime is required for every hour worked on Saturday)

OSH (Overtime is required for every hour worked on Sunday and Holidays)

H/W (Health & Welfare Insurance)

Pensn (Pension)

Vac (Vacation)

Trng (Training)

Explanations

COOK COUNTY

TRUCK DRIVERS (WEST) - That part of the county West of Barrington Road.

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial/Decoration Day, Fourth of July, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration such as the day after Thanksgiving for Veterans Day. If in doubt, please check with IDOL.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date. ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

CERAMIC TILE FINISHER

The grouting, cleaning, and polishing of all classes of tile, whether for interior or exterior purposes, all burned, glazed or unglazed products; all composition materials, granite tiles, warning detectable tiles, cement tiles, epoxy composite materials, pavers, glass, mosaics, fiberglass, and all substitute materials, for tile made in tile-like units; all mixtures in tile like form of cement, metals, and other materials that are for and intended for use as a finished floor surface, stair treads, promenade roofs, walks, walls, ceilings, swimming pools, and all other places where tile is to form a finished interior or exterior. The mixing of all setting mortars including but not limited to thin-set mortars, epoxies, wall mud, and any other sand and cement mixtures or adhesives when used in the preparation, installation, repair, or maintenance of tile and/or similar materials. The handling and unloading of all sand, cement, lime, tile, fixtures, equipment, adhesives, or any other materials to be used in the preparation, installation, repair, or maintenance of tile and/or similar materials. Ceramic Tile Finishers shall fill all joints and voids regardless of method on all tile work, particularly and especially after installation of said tile work. Application of any and all protective coverings to all types of tile installations including, but not be limited to, all soap compounds, paper products, tapes, and all polyethylene coverings, plywood, masonite, cardboard, and any new type of products that may be used to protect tile installations, Blastrac equipment, and all floor scarifying equipment used in preparing floors to receive tile. The clean up and removal of all waste and materials. All demolition of existing tile floors and walls to be re-tiled.

COMMUNICATIONS ELECTRICIAN - Installation, operation, inspection, maintenance, repair and service of radio, television, recording, voice sound vision production and reproduction, telephone and telephone interconnect, facsimile, data apparatus, coaxial, fibre optic and wireless equipment, appliances and systems used for the transmission and reception of signals of any nature, business, domestic, commercial, education, entertainment, and residential purposes, including but not limited to, communication and telephone, electronic and sound equipment, fibre optic and data communication systems, and the performance of any task directly related to such installation or service whether at new or existing sites, such tasks to include the placing of wire and cable and electrical power conduit or other raceway work within the equipment room and pulling wire and/or cable through conduit and the installation of any incidental conduit, such that the employees covered hereby can complete any job in full.

MARBLE FINISHER

Loading and unloading trucks, distribution of all materials (all stone, sand, etc.), stocking of floors with material, performing all rigging for heavy work, the handling of all mateiral that may be needed for the installation of such materials, building of scaffolding, polishing if needed, patching, waxing of material if damaged, pointing up, caulking, grouting and cleaning of marble, holding water on diamond or Carborundum blade or saw for setters cutting, use of tub saw or any other saw needed for preparation of material, drilling of holes for wires that anchor material set by setters, mixing up of molding plaster for installation of material, mixing up thin set for the installation of material, mixing up of sand to cement for the installatin of material and such other work as may be required in helping a Marble Setter in the handling of all material in the erection or installation of interior marble, slate, travertine, art marble, serpentine, alberene stone, blue stone, granite and other stones (meaning as to stone any foreign or domestic materials as are specified and used in building interiors and experiors and customarily known as stone in the trade), carrara, sanionyx, vitrolite and similar opaque glass and the laying of all marble tile, terrazzo tile, slate tile and precast tile, steps, risers treads, base, or any other materials that may be used as substitutes for any of the aforementioned materials and which are used on interior

and experior which sare installed in a similar manner.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

TERRAZZO FINISHER

The handling of sand, cement, marble chips, and all other materials that may be used by the Mosaic Terrazzo Mechanic, and the mixing, grinding, grouting, cleaning and sealing of all Marble, Mosaic, and Terrazzo work, floors, base, stairs, and wainscoting by hand or machine, and in addition, assisting and aiding Marble, Masonic, and Terrazzo Mechanics.

OPERATING ENGINEERS - BUILDING

Class 1. Mechanic; Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson attachment; Batch Plant; Benoto; Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver; Concrete Placer; Concrete Placing Boom; Concrete Pump (Truck Mounted); Concrete Tower; Cranes, All; Cranes, Hammerhead; Cranes, (GCI and similar Type); Creter Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, one, two and three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Hydro Vac (and similar equipment); Locomotives, All; Motor Patrol; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes; Squeeze Cretes-screw Type Pumps; Raised and Blind Hole Drill; Roto Mill Grinder; Scoops - Tractor Drawn; Slip-form Paver; Straddle Buggies; Tournapull; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Boilers; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Greaser Engineer; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, inside Freight Elevators; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Laser Screed; Rock Drill self-propelled); Rock Drill (truck mounted); Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Combination - Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators - (Rheostat Manual Controlled); Hydraulic Power Units (Pile Driving, Extracting, and Drilling); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 small Electric Drill Winches; Bobcat (up to and including 3/4 cu. yd.).

Class 4. Bobcats and/or other Skid Steer Loaders; Oilers; and Brick Forklift.

OPERATING ENGINEERS - FLOATING

Class 1. Craft foreman (Master Mechanic), diver/wet tender, engineer (hydraulic dredge).

Class 2. Crane/backhoe operator, mechanic/welder, assistant engineer (hydraulic dredge), leverman (hydraulic dredge), and diver tender.

Class 3. Deck equipment operator (machineryman), maintenance of crane (over 50 ton capacity) or backhoe (96,000 pounds or more), tug/launch operator, loader, dozer and like equipment on barge, breakwater wall, slip/dock or scow, deck machinery, etc.

Class 4. Deck equipment operator machineryman/fireman), (4 equipment units or more) and crane maintenance 50 ton capacity and under or backhoe weighing 96,000 pounds or less, assistant tug operator.

OPERATING ENGINEERS - HEAVY AND HIGHWAY CONSTRUCTION Class 1. Craft Foreman; Asphalt Plant; Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Spreader; Autograder/GOMACO or other similar type machines; ABG Paver; Backhoes with Caisson attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted): Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Hammerhead, Linden, Peco & Machines of a like nature; Crete Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Dowell machine with Air Compressor; Dredges; Field Mechanic-Welder; Formless Curb and Gutter Machine; Gradall and Machines of a like nature; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Mounted; Hoists, One, Two and Three Drum; Hydraulic Backhoes; Backhoes with shear attachments; Mucking Machine; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Roto Mill Grinder; Slip-Form Paver; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; Hydraulic Telescoping Form (Tunnel); Tractor Drawn Belt Loader (with attached pusher - two engineers); Tractor with Boom; Tractaire with Attachments; Trenching Machine; Truck Mounted Concrete Pump with Boom; Raised or Blind Hole; Drills (Tunnel Shaft); Underground Boring and/or Mining Machines; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Concrete Wheel Saw; Conveyor Muck Cars (Haglund or Similar Type); Drills, All; Finishing Machine -Concrete; Greaser Engineer; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro-Blaster; All Locomotives, Dinky; Pump Cretes; Squeeze Cretes-Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotory Snow Plows; Rototiller, Seaman, etc., self-propelled; Scoops -Tractor Drawn; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper; Scraper - Prime Mover in Tandem (Regardless of Size); Tank Car Heater; Tractors, Push, Pulling Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Fireman on Boilers; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper - Form-Motor Driven.

Class 4. Air Compressor; Combination - Small Equipment Operator; Directional Boring Machine; Generators; Heaters, Mechanical; Hydraulic Power Unit (Pile Driving, Extracting, or Drilling); Hydro-Blaster; Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Tractaire; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. Bobcats (all); Brick Forklifts, Oilers.

TRAFFIC SAFETY

Work associated with barricades, horses and drums used to reduce lane usage on highway work, the installation and removal of temporary lane markings, and the installation and removal of temporary road signs.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION - EAST & WEST

Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; TEamsters Unskilled dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnatrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 618/993-7271 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.