

**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 than 4:30 p.m. prevailing time twenty-one days prior to the letting of interest. This pre-qualification requirement applies to first time contractors, contractors renewing expired ratings, contractors maintaining continuous pre-qualification or contractors requesting revised ratings. To be eligible to bid, existing pre-qualification ratings must be effective through the date of letting.

**REQUESTS FOR AUTHORIZATION TO BID**

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

**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 bidders check IDOT's website at <http://www.dot.il.gov/desenv/delett.html> before submitting final bid information.

***IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.***

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

<b>Questions Regarding</b>	<b>Call</b>
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

**ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS**

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

# 76

RETURN WITH BID

Proposal Submitted By
Name
Address
City

## Letting November 7, 2008

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL  
(See instructions inside front cover)

**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



**Illinois Department  
of Transportation**

Springfield, Illinois 62764

**Contract No. 60A79  
COOK County  
Section 2005-073LS  
District 1 Construction Funds  
Route FAI 94/90**

PLEASE MARK THE APPROPRIATE BOX BELOW:

A Bid Bond is included.

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

Prepared by	S
Checked by	

(Printed by authority of the State of Illinois)

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## 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 must complete and submit Part B of the Request for Authorization to Bid/or Not For Bid Status form (BDE 124 INT) and submit an original Affidavit of Availability (BC 57).

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

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

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

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

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

### 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

RETURN WITH BID



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. 60A79  
COOK County  
Section 2005-073LS  
Route FAI 94/90  
District 1 Construction Funds**

**Gateway landscaping and irrigation along I-94/90 (Dan Ryan Expressway) at 35th 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.

**RETURN WITH BID**

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

<u>Amount of Bid</u>		<u>Proposal Guaranty</u>	<u>Amount of Bid</u>		<u>Proposal 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.

**Attach Cashier's Check or Certified Check Here**

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.**

**RETURN WITH BID**

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 No.	Sections Included in Combination	Combination Bid	
		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.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SCHEDULE OF PRICES  
 CONTRACT  
 NUMBER -

60A79

State Job # - C-91-109-06  
 PPS NBR - 1-74823-0577  
 County Name - COOK - -  
 Code - 31 - -  
 District - 1 - -  
 Section Number - 2005-073LS

Project Number

Route  
 FAI 94/90

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
A2005034	T-GYMNOCOLA DIO 10H BB	EACH	10.000				
B2006320	T-SYRG RT IS TF 2-1/2	EACH	18.000				
B2006374	T-SYRG RET IS CL 10'	EACH	14.000				
C2C03120	S-FORSYTH HPY CENT 18	EACH	542.000				
C2C04738	S-PHYS OP SMMR 2-1/2H	EACH	222.000				
C2C06004	S-RHUS COPAL PFSS 3'H	EACH	640.000				
C2003353	S-HEPTACOD MIC 8 BB	EACH	12.000				
C2007010	S-ROSA KNOCKOUT CG 3G	EACH	392.000				
E20090Q1	V-EUONY FORT COL 1Q	EACH	1,075.000				
K0030400	PERENNIAL PLANT DAYLI	UNIT	14.000				
K0030450	PERENNIAL PL DAF BULB	UNIT	61.000				
K0030470	PEREN PL ORN GRASS TY	UNIT	32.000				
K1003460	LANDSCAPE MAINT	CAL MO	12.000				
XX000541	EXPLOR EXCAVATION	CU YD	18.000				
XX003710	BACKFLOW PREVENT 2	EACH	2.000				



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 FAI 94/90

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
XX104800	COMB CC&G TBV.12	FOOT	99.000				
X0301407	PERENNIAL PLT-GAL POT	UNIT	48.000				
X0322256	TEMP INFO SIGNING	SQ FT	103.000				
X0325103	WATER METR IN VAULT 2	EACH	2.000				
X0325104	WATER TAP 2	EACH	2.000				
X0325105	IRRIGATION SYSTEM	SQ YD	5,210.000				
X0325106	IRR SYS FALL SHUTDOWN	EACH	2.000				
X0325107	IRR SYS SPRING STRTUP	EACH	2.000				
X0325604	WEED CONT PRE-EM HBCD	GALLON	2.000				
X0325962	PEREN PL ALLIUM BULBS	UNIT	33.000				
X0325970	SOIL CONDITION 3	SQ YD	4,360.000				
X0325971	CAST/PL DET WARNSURF	SQ FT	26.000				
X0656300	PAVEMENT REM & REPL	SQ YD	249.000				
X7011015	TR C-PROT EXPRESSWAYS	L SUM	1.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION  
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Project Number

Route  
 FAI 94/90

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
Z0048665	RR PROT LIABILITY INS	L SUM	1.000				
25000210	SEEDING CL 2A	ACRE	0.560				
25000400	NITROGEN FERT NUTR	POUND	52.000				
25000500	PHOSPHORUS FERT NUTR	POUND	52.000				
25000600	POTASSIUM FERT NUTR	POUND	52.000				
25000750	MOWING	ACRE	2.600				
25100630	EROSION CONTR BLANKET	SQ YD	2,711.000				
28000510	INLET FILTERS	EACH	26.000				
42001300	PROTECTIVE COAT	SQ YD	306.000				
42400200	PC CONC SIDEWALK 5	SQ FT	2,556.000				
44000500	COMB CURB GUTTER REM	FOOT	99.000				
44000600	SIDEWALK REM	SQ FT	2,556.000				
56104600	WATER VALVES 2	EACH	2.000				
56104605	WATER VALVES 2 1/2	EACH	6.000				
56200900	WATER SERV LINE 2 1/2	FOOT	380.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION  
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Project Number

Route  
 FAI 94/90

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
66400550	CH LK FENCE 4 SPL	FOOT	1,325.000				
67100100	MOBILIZATION	L SUM	1.000				
70101800	TRAF CONT & PROT SPL	L SUM	1.000				
78008200	POLYUREA PM T1 LTR-SY	SQ FT	59.000				
78008240	POLYUREA PM T1 LN 8	FOOT	61.000				
78008250	POLYUREA PM T1 LN 12	FOOT	501.000				
78008270	POLYUREA PM T1 LN 24	FOOT	70.000				

**CONTRACT NUMBER**

**60A79**

**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.

## RETURN WITH BID

### **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.

## RETURN WITH BID

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.

## RETURN WITH BID

### **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.

## RETURN WITH BID

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

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

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

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

### **E. International Anti-Boycott**

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

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

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

### **F. Drug Free Workplace**

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

2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.

(b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.

(c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.

(d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.

(e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.

(f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.

(g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.



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G. Debt Delinquency

1. The Illinois Procurement Code provides:

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

The contractor or bidder certifies that it, or any affiliate, is not barred from being awarded a contract under 30 ILCS 500. Section 50-11 prohibits a person from entering into a contract with a State agency if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The contractor further acknowledges that the contracting State agency may declare the contract void if this certification is false or if the contractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

H. Sarbanes-Oxley Act of 2002

1. The Illinois Procurement Code provides:

Section 50-60(c).

The contractor certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 for a period of five years prior to the date of the bid or contract. The contractor acknowledges that the contracting agency shall declare the contract void if this certification is false.

I. Addenda

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

J. Section 42 of the Environmental Protection Act

The contractor certifies in accordance with 30 ILCS 500/50-12 that the bidder or contractor is not barred from being awarded a contract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The contractor acknowledges that the contracting agency may declare the contract void if this certification is false.

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

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

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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.

## RETURN WITH BID

### **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.

**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. Disclosure Forms. 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 NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES \_\_\_ NO \_\_\_
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$102,600.00? YES \_\_\_ NO \_\_\_
3. 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 per person per bid 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 NOT APPLICABLE STATEMENT 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 NOT APPLICABLE STATEMENT on Form A does not 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:

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**ILLINOIS DEPARTMENT  
OF TRANSPORTATION**

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

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

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

**DISCLOSURE OF FINANCIAL INFORMATION**

**1. Disclosure of Financial Information.** The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than \$102,600.00 (60% of the Governor's salary as of 7/1/07). **(Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)**

**FOR INDIVIDUAL (type or print information)**

**NAME:** \_\_\_\_\_

**ADDRESS** \_\_\_\_\_

**Type of ownership/distributable income share:**

stock \_\_\_\_\_ sole proprietorship \_\_\_\_\_ Partnership \_\_\_\_\_ other: (explain on separate sheet):  
% or \$ value of ownership/distributable income share: \_\_\_\_\_

**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 \_\_\_
2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$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**

3. 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 \_\_\_

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(b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years.

Yes \_\_\_ No \_\_\_

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 \_\_\_

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(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 \_\_\_

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(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 \_\_\_ No \_\_\_

---

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

Yes \_\_\_ No \_\_\_

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**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:  \_\_\_\_\_ Date \_\_\_\_\_  
Signature of Individual or Authorized Representative

**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.**

\_\_\_\_\_ Date \_\_\_\_\_  
Signature of Authorized Representative

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ILLINOIS DEPARTMENT  
OF TRANSPORTATION

Form B  
Other Contracts &  
Procurement Related Information  
Disclosure

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

Disclosure of the information contained in this Form is required by the Section 50-35 of the 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**

<input type="checkbox"/>	_____	_____
	Signature of Authorized Representative	Date



## **RETURN WITH BID**

### **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.



**RETURN WITH BID**

**Contract No. 60A79  
COOK County  
Section 2005-073LS  
Route FAI 94/90  
District 1 Construction Funds**

**PART II. WORKFORCE PROJECTION - continued**

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

The undersigned bidder projects that: (number) \_\_\_\_\_ new hires would be recruited from the area in which the contract project is located; and/or (number) \_\_\_\_\_ new hires would be recruited from the area in which the bidder's principal office or base of operation is located.

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

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

**PART III. AFFIRMATIVE ACTION PLAN**

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

B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications.

Company \_\_\_\_\_ Telephone Number \_\_\_\_\_  
\_\_\_\_\_  
Address \_\_\_\_\_

**NOTICE REGARDING SIGNATURE**

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: \_\_\_\_\_

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

**RETURN WITH BID**

**Contract No. 60A79  
COOK County  
Section 2005-073LS  
Route FAI 94/90  
District 1 Construction Funds**

PROPOSAL SIGNATURE SHEET

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

Firm Name \_\_\_\_\_  
(IF AN INDIVIDUAL) Signature of Owner \_\_\_\_\_  
Business Address \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Firm Name \_\_\_\_\_  
By \_\_\_\_\_  
(IF A CO-PARTNERSHIP) Business Address \_\_\_\_\_  
\_\_\_\_\_  
Name and Address of All Members of the Firm:  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Corporate Name \_\_\_\_\_  
By \_\_\_\_\_  
Signature of Authorized Representative  
\_\_\_\_\_  
Typed or printed name and title of Authorized Representative  
(IF A CORPORATION) Attest \_\_\_\_\_  
Signature  
(IF A JOINT VENTURE, USE THIS SECTION  
FOR THE MANAGING PARTY AND THE  
SECOND PARTY SHOULD SIGN BELOW) Business Address \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Corporate Name \_\_\_\_\_  
By \_\_\_\_\_  
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, please attach an additional signature sheet.



**Illinois Department  
of Transportation**

**Return with Bid**

**Division of Highways  
Proposal Bid Bond  
(Effective 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 Name)

\_\_\_\_\_  
(Company Name)

By: \_\_\_\_\_  
(Signature & Title)

By: \_\_\_\_\_  
(Signature of Attorney-in-Fact)

**Notary Certification for Principal and Surety**

STATE OF ILLINOIS,

County of \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public in and for said County, do hereby certify that

\_\_\_\_\_ and \_\_\_\_\_  
(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this \_\_\_\_\_ day of \_\_\_\_\_ A.D. \_\_\_\_\_

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Notary Public

In lieu of completing the above section of the Proposal Bid Form, the Principal may file an Electronic Bid Bond. By signing the proposal and marking the check box next to the Signature and Title line below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.

\_\_\_\_\_  
Electronic Bid Bond ID#

\_\_\_\_\_  
Company / Bidder Name



\_\_\_\_\_  
Signature and Title

# PROPOSAL ENVELOPE



## PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

Name:
Address:
Phone No.

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

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

### **NOTICE**

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

# CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

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## 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. 60A79  
COOK County  
Section 2005-073LS  
Route FAI 94/90  
District 1 Construction Funds**



**Illinois Department of Transportation**



## NOTICE TO BIDDERS

1. **TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., November 7, 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. 60A79  
COOK County  
Section 2005-073LS  
Route FAI 94/90  
District 1 Construction Funds**

**Gateway landscaping and irrigation along I-94/90 (Dan Ryan Expressway) at 35th 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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## STATE OF ILLINOIS

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### 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 construction of FAI 90/94 (I-90/94), Section 2005-073 LS, Cook County and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

FAI 90/94 (I-90/94)  
Section 2005-073 LS  
Cook County  
Contract No. 60A79

### LOCATION OF PROJECT

The project is located at the intersection of the Dan Ryan Expressway (I-94/90) and the 35<sup>th</sup> Street Bridge in the City of Chicago, in Cook County. On the east and west sides of this bridge are two frontage roads that parallel the Expressway these roads are Wentworth Avenue to the west and La Salle Street to the east. The project consists of four separate quadrants at all four corners of this bridge: a south east quadrant that extends 575' south of the bridge between the expressway and La Salle Street, a north east quadrant that extends 40' north of the bridge between the expressway and La Salle Street, a southwest quadrant that extends 45' south of the bridge between the expressway and Wentworth Avenue, a northwest quadrant that extends 565' north of the bridge between the expressway and La Salle Street.

### DESCRIPTION OF PROJECT

This project consists of replacing grassy areas with ornamental landscaping of various flowers, grasses, shrubs and trees to create a gateway garden. An irrigation system is also being installed to facilitate the maintenance and care of the newly installed gardens.

### 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 by 11:59 PM on May 1, 2010 except as specified herein and referred to as the overall completion date for the project.

The contract shall include an interim completion date to include installation of all planting materials (excluding bulb type perennials and woody plants), construction of concrete curb, concrete median surface, soil planting mixture, porous granular material, installation and operation/maintenance of the irrigation system, and complete all other work associated with these items for the gateways and corner gardens. The interim completion date shall be June 1, 2009.

During the period from June 1, 2009 to May 1, 2010, weed control, watering and all other landscape maintenance work shall be authorized to the Contractor to carry out as specified in the contract documents and as directed by the Engineer to maintain the health and satisfactory appearance of all plant material. Work during this period shall also include planting bulb type perennials, installation of all required replacement planting materials during the period of establishment, and a fall shut down and spring start up of the irrigation systems for the current and subsequent year.

The Contractor will be allowed to complete all clean-up work and punch list items within 5 working days after the overall completion date. Under extenuating circumstances, the Engineer may direct that certain items of work, not affecting the overall appearance of the gateways, may be completed within the working days allowed for clean up work and punch list items. Temporary lane closures for this work may be allowed at the approval of the Engineer and Bureau of Traffic.

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

## **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.

Contract 62992 – NB Kneewalls Pershing Road to 35<sup>th</sup> Street  
Contract 62993 – NB Kneewalls 35<sup>th</sup> Street to 33<sup>rd</sup> Street  
Contract 62998 – SB Kneewalls Pershing Road to 35<sup>th</sup> Street  
Contract 62999 – SB Kneewalls 35<sup>th</sup> Street to 33<sup>rd</sup> Street  
Contract 60A04 – NB Fence and Gates from 47<sup>th</sup> Place to 31<sup>st</sup> Street  
Contract 60A05 – SB Fence and Gates from 47<sup>th</sup> Place to 31<sup>st</sup> Street

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 Contractors' proposed Construction and Progress Schedule. Any conflicts between Contractors' 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.

**CONTRACTOR COOPERATION**

The Contractor's attention is directed to the fact that other separate contracts may be under construction during the duration of this Contract and that the Contractor will be governed by Article 105.08 of the Standard Specifications.

The Contractor will coordinate proposed project start dates and sequence of construction with the Engineer and other Contractors to present an effective and timely schedule for successful completion of the project.

No additional compensation will be allowed the Contractor for the above requirements or for any delays or inconvenience resulting from the activities of other contractors.

**KEEPING THE EXPRESSWAY OPEN TO TRAFFIC**

Whenever work is in progress on or adjacent to an expressway, the Contractor shall provide the necessary traffic control devices to warn the public and to delineate the work zone as required in these Special Provisions, the Standard Specifications, the State Standards and the District Freeway details. All Contractors' personnel shall be limited to these barricaded work zones and shall not cross the expressway.

The Contractor shall request and gain approval from the Illinois Department of Transportation's Expressway Traffic Operations Engineer (847-705-4151) twenty-four (24) hours in advance of all daily lane, ramp and shoulder closures and seventy-two (72) hours in advance of all permanent and weekend closures on all Freeways and/or Expressways in District One. This advance notification is calculated based on workweek of Monday through Friday and shall not include weekends or Holidays.

**LOCATION: I-90/94 DAN RYAN (29<sup>th</sup> to 95<sup>th</sup>)**

WEEK NIGHT	TYPE OF CLOSURE	ALLOWABLE LANE CLOSURE HOURS	
		INBOUND	OUTBOUND
Sunday thru Thursday	Temporary Partial	8:00PM - 5:00 AM	9:00PM - 6:00 AM
Friday	Ramp & Shoulder	8:00PM (Fri) - 6:00 AM (Sat)	9:00PM (Fri) - 7:00 AM (Sat)
Saturday	Closures	8:00PM (Sat) - Noon (Sun)	9:00PM (Sat) - Noon (Sun)

In addition to the hours noted above, temporary partial ramp and temporary shoulder closures will be allowed weekdays between the hours of 9:00 AM and 3:00 PM.

Narrow lanes and permanent shoulder closures will not be allowed between December 1<sup>st</sup> and April 1<sup>st</sup>.

All daily closures shall be removed during adverse weather conditions such as rain, snow, and/or fog and as determined by the Engineer.

Additional hour restrictions may have to be imposed to facilitate the flow of traffic to and from major sporting events and/or other events.

All 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.

Private vehicles shall not be parked in the work zone. Contractor's equipment and/or vehicles shall not be parked on the shoulders or in the median during non-working hours. The parking of equipment and/or vehicles on State right-of-way will only be permitted at the locations approved by the Engineer.

### **TRAFFIC CONTROL AND PROTECTION (SPECIAL)**

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

Traffic Control and Protection shall be provided as called for in the plans, these Special Provisions, applicable Highway Standards, applicable sections of the Standard Specifications, or as directed by the Engineer.

The governing factor in the execution and staging of work for this project is to provide the motoring public with the safest possible travel conditions along the roadway through the construction zone. The Contractor shall arrange his operations to keep the closing of any lane of the roadway to a minimum.

Traffic Control Devices include signs and their supports, signals, pavement markings, barricades with sand bags, channelizing devices, warning lights, arrow boards, flaggers, or any other device used for the purpose of regulating, detouring, warning or guiding traffic through or around the construction zone.

The Contractor is required to conduct routine inspections of the worksite at a frequency that will allow for the prompt replacement of any traffic control device that has become displaced, worn or damaged to the extent that it no longer conforms to the shape, dimensions, color and operational requirements of the MUTCD, the Traffic Control Standards or will no longer present a neat appearance to motorists. A sufficient quantity of replacement devices, based on vulnerability to damage, shall be readily available to meet this requirement.

The Contractor shall be responsible for the proper location, installation and arrangement of all traffic control devices. Special attention shall be given to advance warning signs during construction operations in order to keep lane assignment consistent with barricade placement at all times. The Contractor shall immediately remove, cover or turn from the view of the motorists all traffic control devices which are inconsistent with detour or lane assignment patterns and conflicting conditions during the transition from one construction stage to another. When the Contractor elects to cover conflicting or inappropriate signing, materials used shall totally block out reflectivity of the sign and shall cover the entire sign. The method used for covering the signing shall meet with the approval of the Engineer.



The Contractor shall coordinate all traffic control work on this project with adjoining or overlapping projects, including barricade placement necessary to provide a uniform traffic detour pattern. When directed by the Engineer, the Contractor shall remove all traffic control devices, which were furnished, installed and maintained by him under this contract, and such devices shall remain the property of the Contractor. All traffic control devices shall remain in place until specific authorization for relocation or removal is received from the Engineer.

The Contractor shall ensure that all traffic control devices installed by him are operational, functional and effective 24 hours a day, including Sundays and holidays.

Signs. All signs, except those referring to daily lane closures, shall be post mounted in accordance with Standard 701901 for all projects that exceed four days.

Prior to the beginning of construction operations, the Contractor will be provided a sign log of all existing signs within the limits of the construction zone. The Contractor is responsible for verifying the accuracy of the sign log. Throughout the duration of this project, all existing traffic signs shall be maintained by the Contractor. All provisions of Article 107.25 of the Standard Specifications shall apply, except the third paragraph shall be revised to read: "The Contractor shall maintain, furnish and replace at his own expense, any traffic sign or post which has been damaged or lost by the Contractor or a third party."

Whenever any vehicle, equipment, workers or their activities infringe on the shoulder or within 4.5 m (15 feet) of the traveled way and the traveled way remains unobstructed, then the applicable Traffic Control Standard shall be 701006. "Shoulder Work Ahead" sign (W21-5(0)-48) shall be used in lieu of the "Workers" sign (W21-1 or W21-1a).

Barricades. Any drop off greater than 75 mm (3 inches), within 2.5 m (8 feet) of the pavement edge shall be protected by Type I or II barricades equipped with mono-directional steady burn lights at 8 m (25 feet) center to center spacing. Barricades that are placed in excavated areas shall have leg extensions installed such that the top of the barricade is in compliance with the height requirements of Standard 701901.

All Type I and Type II barricades, drums, and vertical panels shall be equipped with a steady burn light when used during hours of darkness unless otherwise stated herein.

Check barricades shall be placed in work areas perpendicular to traffic every 300 m (1,000 feet), one per lane and per shoulder, to prevent motorists from using work areas as a traveled way. Two additional check barricades shall be placed in advance of each patch excavation or any hazard in the work area, the first at the edge of the open traffic lane and the second centered in the closed lane. Check barricades shall be Type I or II and equipped with a flashing light.

Public Convenience and Safety. At the preconstruction meeting, the Contractor shall furnish the name of the individual in his direct employ who is to be responsible for the installation and maintenance of the Traffic Control for this project. The Contractor shall also provide a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis to receive notification of any deficiencies regarding traffic control and protection. The Contractor shall dispatch men, materials and equipment to correct any such deficiencies. The Contractor

shall respond to any call from the Department concerning any request for improving or correcting traffic control devices and begin making the requested repairs within two hours from the time of notification.

Personal vehicles shall not park within the right-of-way except in specific areas designated by the Engineer.

**Private vehicles shall not be parked in the work zone. Contractor's equipment and/or vehicles shall not be parked on the shoulders or in the median during non-working hours. The parking of equipment and/or vehicles on State right-of-way will only be permitted at the locations approved by the Engineer.**

No road closure, lane closures or restriction shall be permitted without prior approval by the Engineer.

**All daily lane closures shall be removed during adverse weather conditions such as rain, snow, and/or fog and as determined by the Engineer.**

**Additional lane closure hour restrictions may have to be imposed to facilitate the flow of traffic to and from major sporting events and/or other events.**

Method of Measurement. This item of work will be measured on a lump sum basis for furnishing, installing, maintaining, replacing, relocating and removing the traffic control devices required in the plans, specifications and these Special Provisions.

Basis of Payment. This work will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL), which price shall be payment in full for all labor, materials, transportation, handling and incidentals necessary to furnish, install, maintain, replace, relocate and remove all traffic control devices indicated in the plans, specifications and these Special Provisions. The salvage value of the materials removed shall be reflected in the bid price for this item.

Delays to the Contractor caused by complying with these requirements will be considered incidental to the item for Traffic Control and Protection, and no additional compensation will be allowed.

## **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.

#### HIGHWAY STANDARDS

- 701601 Urban Lane Closure, Multilane, 1w or 2w With Nontraversable Median
- 701701 Urban Lane Closure, Multilane Intersection
- 701801 Lane Closure Multilane 1w or 2w Crosswalk or Sidewalk Closure
- 701901 Traffic Control Devices

#### PLANS AND DETAILS

- TC-10 District 1, Traffic Control And Protection For Side Roads, Intersections And Driveways
- TC-17 District 1, Traffic Control Details For Freeway Shoulder Closures And Partial Ramp Closures
- TC-18 District 1, Signing For Flagging Operations At Work Zone Openings

#### RECURRING SPECIAL PROVISIONS AND SPECIAL PROVISIONS

- Advanced Public Notification
- Traffic Control and Protection (Special)
- Traffic Control for Work Zone Areas
- Keeping The Expressway Open to Traffic
- Reflective Sheeting on Channelizing Devices

#### ADVANCED PUBLIC NOTIFICATION

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.

#### TEMPORARY INFORMATION SIGNING

Description. This item consists of furnishing, installing, maintaining, relocating for various states of construction and eventually removing temporary informational signs. Included in this item may be ground mount signs, skid mount signs, truss mount signs, bridge mount signs, and overlay sign panels which cover portions of existing signs.

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

	<u>Item</u>	<u>Article/Section</u>
a)	Sign Base (Notes 1 & 2)	1090
b)	Sign Face ( Note 3)	1091
c)	Sign Legends	1092
d)	Sign Supports	1093
e)	Overlay Panels (Note 4)	1090.01

- Note 1. The Contractor may use 16mm (5/8 inch) instead of 19mm (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 1084.02(b).
- Note 4. The overlay panels shall be 2mm (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 roadway and/or within the construction zone shall be installed according to the requirements of Article 702.05 and Article 720.04. The signs shall be 2.1m (7') above the near edge of the pavement and shall be a minimum of 600mm (2') beyond the edge of the paved shoulder. A minimum of 2 posts shall be used.

The attachment of temporary signs to existing sign structures or sign panels shall be approved by the Engineer. Any damage to the existing signs due to the Contractor's operations shall be repaired or signs replaced, as determined by the Engineer, at the Contractor's expense.

Signs which are placed on overhead bridge structures shall be fastened to the handrail with stainless steel bands. These signs shall rest on the concrete parapet where possible. The Contractor shall furnish mounting details for approval by the Engineer.

Method of Measurement. This Work shall be measured for payment in square feet edge to edge (horizontally and vertically).

All hardware, posts or skids, supports, bases for ground mounted signs, connections, which are required for mounting these signs are included as part of this pay item.

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

### **CONTRACTOR'S DAILY WORK SCHEDULE**

Description. The Contractor shall submit a daily work schedule to the Resident 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.

### **TRAFFIC CONTROL FOR WORK ZONE AREAS**

Effective: 9/14/95

Revised: 1/30/03

Work zone entry and exit openings shall be established daily by the Contractor with the approval of the Engineer. All vehicles including cars and pickup trucks shall exit the work zone at the exit openings. All trucks shall enter the work zone at the entry openings. These openings shall be signed in accordance with the details shown elsewhere in the plans and shall be under flagger control during working hours.

The Contractor shall plan his trucking operations into and out of the work zone as well as on to and off the expressway to maintain adequate merging distance. Merging distances to cross all lanes of traffic shall be no less than 1/2 mile. This distance is the length from where the trucks enter the expressway to where the trucks enter the work zone. It is also the length from where the trucks exit the work zone to where the trucks exit the expressway. The stopping of expressway traffic to allow trucks to change lanes and/or cross the expressway is prohibited.

Failure to comply with the above requirements will result in a Traffic Control Deficiency charge. The deficiency charge will be calculated as outlined in the special provision for "**TRAFFIC CONTROL DEFICIENCY DEDUCTION**". The Contractor will be assessed this daily charge for each day a deficiency is documented by the Engineer.

### **EROSION CONTROL BLANKET**

This Special Provision revises Section 250 of the Standard Specifications for Road and Bridge Construction to eliminate the use of Excelsior Blanket for Erosion Control Blanket. Delete Article 250.04(a) Excelsior Blanket.

### **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 specification. 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 Chicago Building Code and Illinois Plumbing Code (latest edition).

General Requirements: 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 1<sup>st</sup> – 31<sup>st</sup>):

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 1<sup>st</sup> and must be completed not later than October 31<sup>st</sup>. 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 1<sup>st</sup> – May 1<sup>st</sup>):

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 1<sup>st</sup> and must be completed not later than May 1<sup>st</sup>. This work includes, but is not limited to, the following activities:

1. 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 1<sup>st</sup> and May 1<sup>st</sup>. 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 1<sup>st</sup> – May 1<sup>st</sup>):

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 1<sup>st</sup> and May 1<sup>st</sup>, 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 not be paid for separately, but shall be considered incidental to this pay item.

Method of Measurement: 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 1<sup>st</sup> and completing not later than October 31<sup>st</sup>.

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 1<sup>st</sup> and completing not later than May 1<sup>st</sup>.

CHICAGO DEPARTMENT OF TRANSPORTATION  
 DIVISION OF INFRASTRUCTURE MANAGEMENT

IRRIGATION SHUT DOWN

Project Name, Location, Limits:			CDOT #:
<b>CDOT CONTACT</b>	<b>NAME</b>	<b>PHONE</b>	<b>PAGER</b>
Project Manager			
Resident Engineer			
<b>General Contractor or Maintenance Contractor (if applicable)</b>			
Contractor:		Office Phone:	
Address:		Office Fax:	
Contact Person:		Phone/Pager:	
<b>Plumber Information</b>			
Plumber:		Office Phone:	
Address:		Office Fax:	
Contact Person:		Phone/Pager:	

Shut-down Information: \_\_\_\_\_

No. of RPZ's to be installed/certified: \_\_\_\_\_ Size: \_\_\_\_\_

(List individual rpz locations and storage site on back of form)

Dept. of Water Management contact: \_\_\_\_\_

Phone No. \_\_\_\_\_ Date contacted: \_\_\_\_\_

"B" Permit No. \_\_\_\_\_ Issue date: \_\_\_\_\_

CHICAGO DEPARTMENT OF TRANSPORTATION  
 DIVISION OF INFRASTRUCTURE MANAGEMENT

IRRIGATION START-UP

Project Name, Location, Limits:			CDOT #:
<b>CDOT CONTACT</b>	<b>NAME</b>	<b>PHONE</b>	<b>PAGER</b>
Project Manager			
Resident Engineer			
<b>General Contractor or Maintenance Contractor (if applicable)</b>			
Contractor:		Office Phone:	
Address:		Office Fax:	
Contact Person:		Phone/Pager:	
<b>Plumber Information</b>			
Plumber:		Office Phone:	
Address:		Office Fax:	
Contact Person:		Phone/Pager:	

Start-up Information: _____
No. of RPZ's to be installed/certified: _____ Size: _____
(List individual rpz locations and storage site on back of form)
Dept. of Water Management contact: _____
Phone No. _____ Date contacted: _____
"B" Permit No. _____ Issue date: _____

**RPZ SERVICE AND CERTIFICATION RECORD**

<b>Location</b>	<b>Install Date</b>	<b>Certification Date</b>	<b>In-Service Date</b>

## Irrigation System

### **Description:**

This work includes design and installation of the irrigation system as indicated on the drawings and as specified herein.

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.

All elements of the Contractor's design shall allow for the future build out of the northeast (NE) and southwest (SW) quadrants (by a future contract), as shown on the drawings. This contract's installation shall be designed such that the future installation will not require the upgrade of any components installed by this contract and the future installation can be connected to this contract's installation with a minimal disturbance to the surrounding terrain and infrastructure.

The areas to be irrigated in the future consist of 871 square yards at the northeast quadrant and 956 square yards in the southwest quadrant. In addition to the 1,684 square yards, at the southeast quadrant, and the 1,699 square yards, at the northwest quadrant, to be irrigated by this contract.

All design and work performed by this contract to provide an installation that is ready for the future expansion, specified above, will not be measured for payment but will be considered as included in the cost of the areas to be irrigated by this contract.

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.

This work shall include monitoring and adjusting the completed system to assure healthy plant development.

### **Water Services:**

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.

Water Service Components must be installed prior to the installation of the irrigation system, unless otherwise approved by the Engineer.

The Water Service Components to be provided in this contract 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.

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:**

This contract will use battery powered controllers.

This specification includes requirements for battery powered components. .

Contractor shall label all wire to indicate they belong to the irrigation system, as directed by the Engineer.

**Codes and Standards:**

Codes: All plumbing work shall be installed within applicable provisions of the City of Chicago building codes.

All devices and their installation must be in accordance with the City of Chicago Plumbing Code.

**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:

Max velocity = 5 feet per second.

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.

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

PSI variance:

All spray heads should operate at  $\pm 3$  psi at every spray head within a zone.

All zones should operate at  $\pm 3$  psi at every zone within a system.

Isolation Valves:

Median Planters Isolate each median planter

Parkway Planters Isolate every 300 feet

Turf, Parks, & Malls Per Engineer's Approval

Head Spacing:

Median and Parkway Planters: 10 feet max spacing

Turf, Parks, Malls, and Plazas: 50% of the diameter of throw minimum.

Square or triangular spacing must be used. The heads should have a matched precipitation rate.

Angle of Trajectory: Should be calculated so that the spray will be above the mature plant height.

Precipitation:

Non-turf: Minimum 1 ½ Inch per week

Turf: Minimum 1 Inch per week

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.

Wiring size: calculations must be made to account for voltage drops and any splicing must be reflected on the shop drawings.

Quick Couple Valves Spacing:

Median Planters: 200 feet or 1 per median

Parkway Planters: 200 feet or 3 per block

Parks, Malls and Plazas: 100 feet radius between valves, minimum

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:**

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.

Shop drawings shall include pipe detailing, controller layout, fabrication and installation of irrigation systems. Indicate plans, elevations and dimensions, including all accessories.

Submittals shall include hydraulic calculations for circuit pressure losses and existing water pressure at the main.

Submittals shall include wiring sizes and electrical calculations.

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.

PVC or Polyethylene Piping & Fittings:

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 SDR-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.

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. Such tape shall be placed so that it is six (6) inches below grade, directly above the entire length of the irrigation system piping network. The warning tape shall be 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.

Battery Operated Controller:

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.

Install Irrigation Controller:

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 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.

The cabinet will be able to be locked with a single lock. The lock will be provided by the Engineer.

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.

**Solenoid & Control Module for Control Valves (Battery Operated)**

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.

**Installation Solenoid and Control Module for Control Valves (Battery Operated)**

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.

**Heads: Rotary, Spray, Swing Joints:**

- 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 cyclac. 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.

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.

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.

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.

Control Wiring:

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.

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.

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 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, Sheboygan, Wisconsin, or approved equivalent.

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

Installation of Valve Boxes:

Each 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.

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.

Drip Lines Installation:

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 than 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 5-minute 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.

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 foot of planted area.

Basis of Payment: IRRIGATION SYSTEM will be paid for at the contract unit price per square foot 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.

**PLANTING PERENNIAL PLANTS**

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

Bulbs shall be planted between October 15 and November 30.

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

Ornamental Herbaceous Plants and Prairie Type Plants shall be planted between May 1 and June 1.

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.
- Soil Conditioner shall be added and applied to the planting beds. See specification for Soil Conditioner. This soil amendment shall be tilled and cultivated into the soil to create a planting bed with a total depth of nine (9) inches.
- 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 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) Soil Conditioner will be paid for as specified in Soil Conditioner.
- b) Pre-emergent Herbicide will be paid for as specified in Weed Control, Pre-emergent Herbicide.
- c) Payment for Shredded Mulch shall be included in contract unit price of the perennial plant pay item.



- d) 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 October 1<sup>st</sup> and November 30<sup>th</sup> except that evergreen planting shall be performed between August 15<sup>th</sup> and October 15<sup>th</sup>.

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 from 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 31<sup>st</sup>, 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.

### **REQUIRED INSPECTION OF WOODY PLANT MATERIAL**

Delete Article 1081.01(c)(1) and substitute the following:

Inspection of plant material will be made at the nursery by the Engineer, or a duly authorized representative of the Department; all plant material must be in the field of the nursery supplying the material. The place of growth for all material, and subsequent inspection, must be located within 200 miles of the project. The Contractor shall provide notice of the plant material to be inspected to the Engineer at least seven (7) weeks prior to the expected date of installation. Written certification by the Nursery will be required certifying that the plants are true to their species and/or cultivar specified in the plans. The Department reserves the right to place identification seals on any or all plants selected. No trees shall be delivered without IDOT seal. Plant material not installed within 60 days of initial inspection will be required to be re-inspected.

### **WEED CONTROL, PRE-EMERGENT HERBICIDE**

Description: 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.

Materials: The pre-emergent herbicide (Pendulum® AquaCap™ or equivalent) shall have the following formulation:

A. Active Ingredient	
*Pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-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.**

Schedule: 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.

Method: 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.

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

Basis of Payment: 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.

## **GENERAL REQUIREMENTS FOR WEED CONTROL SPRAYING**

### Experience:

The Contractor shall have previous experience with the use of weed control chemicals. He/she shall have had at least one (1) season's experience in the use of their chemicals in spraying highway right-of-way or at least three (3) season's experience in their use in farm or custom spraying. The Contractor shall observe and comply with all sections of the Illinois Custom Spray Law, including licensing.

Equipment:

The equipment used shall consist of a vehicle-mounted tank, pump, spray bar and handgun, plus any other accessories needed to complete the specified work. Spraying shall be done through multiple low-pressure flooding or broad jet nozzles mounted on spray bars operated not more than 36" above the ground. If different sizes or types of nozzles are used to make up the spray pattern, the pressure, sizes and capacities shall be adjusted to provide a uniform rate of application for each segment of the spray pattern. Hand spray guns may be used for spraying areas around traffic control devices, lighting standard and similar inaccessible areas. Maximum speed of the spray vehicle during application of chemical shall be five (5) miles per hour.

Pumps used shall have a volume and pressure capacity range sufficient to deliver the mixture at a pressure to provide the required coverage and to keep the spray pattern full and steady without pulsation or excessive pressure as to cause fogging. Maximum pressure for application shall be 15 PSI. Quick acting shut-off valves and spring-loaded ball check valves shall be provided to stop the spray pattern with a minimum of nozzle drip. In areas where the spray vehicle must traverse the right-of-way, a four-wheel drive vehicle with flotation tires will be required to minimize damage to the ground surface.

Prior to beginning work, the Contractor shall obtain approval from the Engineer of the spraying equipment proposed for completing this work. The proposed equipment shall be in an operational condition and available for inspection by the Engineer at least two (2) weeks prior to the proposed starting time. If requested by the Engineer, the Contractor shall demonstrate the calibration of the equipment.

The equipment must provide consistently uniform coverage and keep the spray mixture sufficiently agitated or the work will be suspended until the equipment is repaired or replaced.

Spraying Areas:

This work includes roadsides and other types of right-of-way of various widths and gradients. Spray areas often extend more than thirty (30) feet from the edge of the roadway, requiring both spray bar and hand gun applications.

When the description of work requires weed control of a stated species, such as teasel, the chemical shall be applied only to locations where the stated species is present. When the description of work requires general weed control within a bed or area, such as broadleaf weed control in turf, then the chemical shall be applied to the entire bed or area.

Exclusion of Spraying Areas:

Areas where weed control spraying is inappropriate or detrimental to the environment, desirable planting, or private property shall be excluded from the spray area.

Spraying will not be permitted over any drainage swales or waterways, or other areas where the chemical label prohibits application. Spraying within 150 feet of a natural area or site where endangered or threatened species occur.

Responsibility for Prevention of Damage to Private Property:

The Contractor shall, at all times, exercise extreme caution to prevent damage to residential plantings, flower or vegetable gardens, vegetable crops, farm crops, orchard or desirable plants adjacent to the roadside.

The Contractor or Department receives a complaint, the Contractor shall contact a complaint within ten (10) days after receiving a claim for damages, either in person or by letter. The Contractor, or his authorized representative, shall make a personal contact with the complainant within twenty (20) days. The Engineer shall also be notified by the Contractor of all claims for damage he received and shall keep the Engineer informed as to the progress in arriving at a settlement for such claims.

Communication with the Engineer:

The Contractor is required to communicate with the Engineer to receive all required approvals in a timely way and to assure that the Engineer can accurately document the work performed.

It shall be the Contractor's responsibility to assure that all chemical containers are opened and added to the spray mixture in the presence of the Engineer.

The Contractor shall obtain approval from the Engineer to proceed with spraying at each location 24 hours prior to the proposed spray operations.

**LANDSCAPE MAINTENANCE**

**GENERAL REQUIREMENTS**

- A. The Contractor shall not begin LANDSCAPE MAINTENANCE of any area without written notification from the Engineer.
- B. Following notification from the Engineer to maintain an area, the Contractor shall provide all labor, material and equipment necessary to perform the requirements specified for the duration of this contract, unless otherwise directed by the Engineer. Any and all Sub-Contractors of the General Contractor shall be held accountable to the same applicable specifications as the General Contractor.
- C. The objective is to utilize the best horticultural practices to promote the health and optimal appearance of all landscaped areas. This contract shall be in force twelve months of the year. Maintenance & Service activities will include, but shall not be limited to weeding, litter removal, flower & foliage care, clean-up of landscape beds, pruning, straightening and staking trees (as required by the Engineer), mulching, fertilizing, syringing plants and flushing landscaped beds, gypsum application, integrated pest management, inspections, landscape maintenance and repair, hardscape maintenance, and irrigation system operation and maintenance. All plant materials, planting soil mixtures and conditioners, and other materials required for maintenance activities, as required by the Engineer, will conform to the specifications and be considered incidental to the specific pay items for LANDSCAPE PLANTINGS, SOIL PLANTING MIXTURE, and SOIL CONDITIONER, 3 INCH, of various types.

- D. Note: Work specified under this document may or may not take place within the months specified. Weather conditions may delay certain aspects of this contract and may expedite others. The Contractor is required by this contract to coordinate with the Engineer to ensure that any delayed work is performed and completed within the soonest timeframe within seasonal limits.
- E. Work days shall be scheduled a minimum of one (1) day per week, or more as needed to complete all necessary work by the landscape crew. Scheduled maintenance days shall be evenly staggered in order to maintain a manicured appearance. Work not completed on the first scheduled day of the week shall be completed the following day to avoid an unfinished appearance without compromising any remaining scheduled days. Work specified to take place in a specific month within this document may be rescheduled at the Engineer's discretion. It is the responsibility of the Contractor to add additional crews in order to meet desired completion dates and maintenance schedules. Installation of plant material or the repair of any hardscape element shall be performed by a separate and distinct crew and shall not interfere with the landscape maintenance operation. All Subcontractors of the General Contractor shall adhere to the same specifications noted.
- F. All landscaped areas shall be inspected a minimum of one (1) time per week by the Contractor's staff certified Horticulturist and (1) time every two weeks by Contractor's staff professionally licensed Arborist. The inspection shall assess the overall appearance, performance and health of all plant material in relation to moisture conditions, soil conditions, pest and disease problems, pruning requirements, and horticultural techniques.
- G. The Horticultural Inspection Report shall be submitted within twenty-four (24) hours to the Engineer listing all locations, findings, recommendations, necessary work, and proposed schedule for work. This report shall also note irrigation functions, litter removal and weeding needs, and any changes in the condition of the planter hardscape. This report shall be filled out by the Contractor's staff certified Horticulturist and shall not be confused with or replace the daily maintenance report.
- H. The Arborist Inspection Report shall be submitted within twenty-four (24) hours to the Engineer, listing all locations, findings, recommendations, necessary work, and proposed schedule for work.
- I. The Contractor is required to submit and adhere to monthly schedules delineating weekly (M-F) inspections, locations and work days. All monthly schedules shall be submitted the last week of the month preceding the month specified. The Engineer shall receive notification of any changes to the monthly and or weekly schedules a minimum of 48 hrs prior to such changes. Prior notification of any weekend or second shift work will also require a 48 hour notice and approval prior to the commencement of such work. Any deviation from the monthly schedule unless at the request of the Engineer may result in the assessment of monetary deductions.
- J. The Landscape Maintenance Report, the Horticultural Inspection Report, and the Arborist Inspection Report, shall be submitted within twenty-four (24) hours listing all locations, work performed, recommendations, work remaining, and proposed schedule for work. These reports shall be sent via e-mail, fax, or delivered to the Engineer. **If the report is not received, it will be assumed that no work was performed and no payment will be made. Back dated reports will not be accepted.** The Landscape Maintenance Reports may be filled out by the landscape crew foreman. The Horticultural Inspection Report shall be filled out by the certified Horticulturist. The Arborist Inspection Report shall be filled out by the professional licensed Arborist.



- K. The Contractor is required to meet monthly, or as requested, with the Engineer for a maintenance and performance review. The Contractor shall ensure the attendance of maintenance foreman responsible for areas to be discussed, as well as the horticulturalist, and arborist as required to discuss issues or as requested by the Engineer. The Contractor shall submit a letter to the Engineer within three (3) days of the review, summarizing any action required of the Contractor and the proposed schedule for action.
- L. The tasks below are inclusive of this pay item. Any one task may or may not be limited to the month specified. The tasks listed per month are representative of typical tasks required to maintain the planting installations.

### **JANUARY LANDSCAPE MAINTENANCE**

Check each location a minimum of once per month or as directed and remove any litter found within the pre-determined geographic area and along walks & curbs. This shall include the sweeping of all walkways, curbs and plazas as required. Check for and remove any debris caught in trees and shrubs. Check all hardscape components for vehicle damage/ graffiti and report accordingly. Discontinue trash collection at the Engineer's direction during periods of excessive snow fall. Check and maintain all winter coverings, as required. Repair hardscape elements as directed by the Engineer. Prune any damaged tree branches as needed. The crew foreman shall fill out the daily maintenance form for each location and submit this form within 24 hours to the Engineer.

### **FEBRUARY LANDSCAPE MAINTENANCE**

*Maintenance is the same as January*

(NOTE: RECEIVE WRITTEN APPROVAL FROM THE ENGINEER PRIOR TO BEGINNING MAINTENANCE TO COORDINATE TASKS WITH SEASONAL WEATHER.)

### **MARCH LANDSCAPE MAINTENANCE**

Check each location a minimum of once per month and remove any litter found within the pre-determined geographic area and along walks & curbs. This shall include the sweeping of all walkways, curbs, plazas, and underpasses as required. Check for and remove any debris caught in trees and shrubs. Check all hardscape components for vehicle/ graffiti damage and report accordingly. Any required landscape maintenance work shall be performed at the same time. Remove all winter coverings, as required by the Engineer. Check perennial plantings and reset those plants that have been heaved from the ground due to frost. Inspect all trees and shrubs (including roses) to determine pruning needs and complete this work prior to bud break. Schedule any pruning with the Engineer. Straighten and guy any trees that have shifted over the winter. All guying methods shall first be approved by the Engineer. Mulch planting areas as directed by the Engineer. Repair hardscape elements as directed by the Engineer. The crew foreman shall fill out the daily maintenance form for each location and submit this form within 24 hours to the Engineer.

### **APRIL LANDSCAPE MAINTENANCE**

Check each location a minimum of once per week and remove any litter found within the pre-determined geographic area and along the walks & curbs. This shall include the sweeping of all walkways, plazas curbs, and underpasses as required. Check for and remove any debris caught in trees and shrubs. Check all hardscape components for vehicle/ graffiti damage and report accordingly. Any required landscape maintenance work shall be performed at the same time. The crew foreman shall fill out the daily maintenance form for each location and submit this form within 24 hours to the Engineer. The Contractor's Horticulturist shall continue weekly visits to each location as directed by the Engineer, noting maintenance needs. Crews shall be directed accordingly and the horticultural inspection and arborist inspection forms shall be filled out upon each visit and submitted to the Engineer. Perform spring bed clean-up in all locations.

Trim back all perennials not previously cut back at the discretion of the Engineer. Start-up all irrigation systems as specified. Complete this work prior to month's end. Monitor soil moisture conditions. Adjust irrigation controllers as required. Water semi-irrigated and non-irrigated landscapes as required including the use of portable drip irrigation bags as required in non-irrigation areas. Mulch planting areas as directed by the Engineer. Begin monitoring for pest and disease problems. Report any problems to the Engineer, identifying the problem as well as the method and timing of the IPM control proposed. Begin mowing lawn areas as determined by the Engineer. Monitor all planting beds for weedy conditions and take appropriate measures to maintain all plantings in a weed free condition.

### **MAY LANDSCAPE MAINTENANCE**

Check each location a minimum of once per week and remove any litter found within the medians and along the carriage walks & curbs. This shall include the sweeping of all walkways, plazas, curbs, and underpasses as required. Check for and remove any debris caught in trees and shrubs. Any required landscape maintenance work shall be performed at the same time. The crew foreman shall fill out the daily maintenance form for each location and submit this form within 24 hours to the Engineer. Check all hardscape components for vehicle/ graffiti damage and report accordingly. The Contractor's Horticulturist shall continue weekly visits as directed by the Engineer, noting maintenance needs. Crews shall be directed accordingly and the horticultural inspection and arborist inspection forms shall be filled out upon each visit and submitted to the Engineer. Continue monitoring soil moisture conditions. Adjust irrigation controllers and heads as required to maintain proper coverage. Water semi-irrigated and non-irrigated landscapes as required including the use of portable drip irrigation bags as required in non-irrigation areas. Remove spent flowers and dried foliage from spring blooming bulbs. Report any problems to the Engineer, identifying the problem as well as the method and timing of the IPM control proposed (be on the look-out for aphids and four-lined plant bug). Monitor all planting beds for weedy conditions and take appropriate measures to maintain all plantings in a weed free condition. Continue mowing lawn areas once (1) per week or as directed by the Engineer.

### **JUNE LANDSCAPE MAINTENANCE**

Check each location a minimum of once per week and remove any litter found within the pre-determined geographic area and along walks & curbs. This shall include the sweeping of all walkways, plazas, curbs, and underpasses as required. Check for and remove any debris

caught in trees and shrubs. Any required landscape maintenance work shall be performed at the same time. The crew foreman shall fill out the daily maintenance form for each location and submit this form within 24 hours to the Engineer. Check all hardscape components for vehicle/graffiti damage and report accordingly. The Contractor's Horticulturist shall continue weekly visits to each location as directed by the Engineer, noting maintenance needs. Crews shall be directed accordingly and the horticultural inspection and arborist inspection forms shall be filled out upon each visit and submitted to the Engineer. Continue adjusting irrigation controllers and heads as required to maintain proper coverage. Water semi-irrigated and non-irrigated landscapes as required including the use of portable drip irrigation bags as required in non-irrigation areas. Continue removing spent flowers and dried foliage from spring blooming bulbs.

Begin any required dead-heading, dead-leaving, pruning, and pinching of perennials. Cut back select perennials at the direction of the Engineer to extend blooming periods. Monitor all lawn areas and planting beds for weedy conditions and take appropriate measures to maintain all plantings in a weed free condition. Monitor all landscaped areas for pest and disease problems. Report any problems to the Engineer, identifying the problem as well as the method and timing of the IPM control proposed. Continue mowing lawn areas once (1) per week as directed by the Engineer. Prune all shrubs and hedges (Following blooming period if appropriate).

### **JULY LANDSCAPE MAINTENANCE**

Check each location a minimum of once per week and remove any litter found within the pre-determined geographic area and along the walks and curbs. This shall include the sweeping of all walkways, plazas, curbs, and underpasses as required. Check for and remove any debris caught in trees and shrubs. Any required landscape maintenance work shall be performed at the same time. The crew foreman shall fill out the daily maintenance form for each location and submit this form within 24 hours to the Engineer. Check all hardscape components for vehicle/graffiti damage and report accordingly. The Contractor's horticulturist should continue weekly visits as directed by the Engineer, noting maintenance needs. Crews shall be directed accordingly and the horticultural inspection and arborist inspection forms shall be filled out upon each visit and submitted to the Engineer. Continue adjusting irrigation controllers and heads as required to maintain proper coverage. Water semi-irrigated and non-irrigated landscapes as required including the use of portable drip irrigation bags as required in non-irrigation areas. Begin any required dead-heading, dead-leaving, pruning, and pinching of perennials. Monitor all lawn areas and planting beds for weedy conditions and take appropriate measures to maintain all areas in a weed free condition. Monitor mulch depths and adjust per direction from the Engineer, especially around roses. Report any problems to the Engineer, identifying the problem as well as the method and timing of the IPM control proposed. Watch carefully for mite infestations. Continue mowing lawn areas once (1) per week as directed by the Engineer. The Engineer may direct the Contractor to discontinue mowing during periods of limited growth.

### **AUGUST LANDSCAPE MAINTENANCE**

Check each location a minimum of once per week and remove any litter found within the pre-determined geographic area and along the walks & curbs. This shall include the sweeping of all walkways, plazas, curbs, and underpasses as required. Check for and remove any debris caught in trees and shrubs. Any required landscape maintenance work shall be performed at the same time. The crew foreman shall fill out the daily maintenance form for each location and

submit this form within 24 hours to the Engineer. Check all hardscape components for vehicle damage and report accordingly. The Contractor's Horticulturist shall continue weekly visits as directed by the Engineer, noting maintenance needs. Crews shall be directed accordingly and the horticultural inspection and arborist inspection forms shall be filled out upon each visit and submitted to the Engineer. Continue adjusting irrigation controllers and heads as required to maintain proper coverage. Water semi-irrigated and non-irrigated landscapes as required including the use of portable drip irrigation bags as required in non-irrigation areas. Begin any required dead-heading, dead-leafing, pruning, and pinching of perennials. Monitor all planting beds for weedy conditions and take appropriate measures to maintain all areas in a weed free condition. Monitor mulch depths and adjust per direction from the Engineer, especially around roses. Report any problems to the Engineer, identifying the problem as well as the method and timing of the IPM control proposed. Continue mowing lawn areas once (1) per week as directed by the Engineer.

### **SEPTEMBER LANDSCAPE MAINTENANCE**

Check each location a minimum of once per week and remove any litter found within the pre-determined geographic areas and along the walks & curbs. This shall include the sweeping of all walkways, plazas, curbs, and underpasses as required. Check for and remove any debris caught in trees and shrubs. Any required landscape maintenance work shall be performed at the same time. The crew foreman shall fill out the daily maintenance form for each location and submit this form within 24 hours to the Engineer. Check all hardscape components for vehicle/graffiti damage and report accordingly. The Contractor's Horticulturist shall continue weekly visits as directed by the Engineer, noting maintenance needs. Crews shall be directed accordingly and the horticultural inspection and arborist inspection forms shall be filled out upon each visit and submitted to the Engineer. Continue adjusting irrigation controllers and heads as required to maintain proper coverage. Water semi-irrigated and non-irrigated landscapes as required including the use of portable drip irrigation bags as required in non-irrigation areas. Continue any required dead-heading, dead-leafing, pruning, and pinching of perennials. Monitor all planting beds for weedy conditions and take appropriate measures to maintain all areas in a weed free condition. Continue to monitor mulch depths and adjust per direction from the Engineer. Survey all planting areas specified and note any dead, damaged or missing plants and report to the Engineer. Mulch all other planting areas as directed by the Engineer. Prune shrubs and hedges for the last time this month per the direction of the Engineer. Report any pest and disease problems to the Engineer, identifying the problem as well as the method and timing of the IPM control proposed. Continue mowing lawn areas once (1) per week as directed by the Engineer.

### **OCTOBER LANDSCAPE MAINTENANCE**

Check each location a minimum of once per week and remove any litter found within the pre-determined landscaped areas and along the walks & curbs. This shall include the sweeping of all walkways, plazas, curbs, and underpasses as required. Check for and remove any debris caught in trees and shrubs. Any required landscape maintenance work shall be performed at the same time. The crew foreman shall fill out the daily maintenance form for each location and submit this form within 24 hours to the Engineer. Check all hardscape components for vehicle/graffiti damage and report accordingly. The Contractor's Horticulturist shall continue weekly visits as directed by the Engineer, noting maintenance needs. Crews shall be directed

accordingly and the horticultural inspection and arborist inspection forms shall be filled out upon each visit and submitted to the Engineer. Continue adjusting irrigation controllers as required. Water semi-irrigated and non-irrigated landscapes as required including the use of portable drip irrigation bags as required in non-irrigation areas. Begin fall clean-up of planting beds. Perennials shall not be cut back until the plants go dormant. Monitor all planting beds for weedy conditions and take appropriate measures to maintain all areas in a weed free condition. Continue to monitor mulch depths and adjust per direction from the Engineer. Report any problems to the Engineer, identifying the problem as well as the method and timing of the IPM control proposed. Apply gypsum to all landscaped areas as directed by the Engineer. Begin shutting down irrigation systems this month as directed by the Engineer. Continue mowing lawn areas as determined by the Engineer.

### **NOVEMBER LANDSCAPE MAINTENANCE**

Check each location a minimum of once per month and remove any litter found within the pre-determined landscaped areas and along the walks & curbs. This shall include the sweeping of all walkways, plazas, curbs, and underpasses as required. Check for and remove any debris caught in trees and shrubs. Any required landscape maintenance work shall be performed at the same time. The crew foreman shall fill out the daily maintenance form for each location and submit this form within 24 hours to the Engineer. Check all hardscape components for vehicle/graffiti damage and report accordingly. The Contractor's Horticulturist shall continue weekly as specified by the Engineer, noting maintenance needs. Crews shall be directed accordingly and the horticultural inspection and arborist inspection forms shall be filled out upon each visit and submitted to the Engineer. Report any problems to the Engineer, identifying the problem as well as the method and timing of the IPM control proposed. Finish gypsum applications by the middle of the month. Complete all irrigation system shut downs by the middle of this month. Begin performing any necessary tree pruning maintenance once the trees are dormant. Prune only damaged and diseased branching at this time. Any pruning requires prior approval from the Engineer. Complete fall bed clean-up this month. Perennial foliage shall not be cut back until plants go dormant. Mulch planting areas as directed by the Engineer. Check and maintain all winter coverings, as required.

### **DECEMBER LANDSCAPE MAINTENANCE**

Check each location a minimum of once per month and remove any litter found within the pre-determined landscaped areas and along the walks & curbs. This shall include the sweeping of all walkways, plazas, curbs, and underpasses required. Check for and remove any debris caught in trees and shrubs. Check all hardscape components for vehicle/ graffiti damage and report accordingly. Discontinue trash collection at the Engineers direction during periods of excessive snow fall. Check and maintain all winter coverings, as required. Repair hardscape elements as directed by the Engineer.

***NOTE: Work specified in this document may or may not take place within the months specified. Weather conditions may delay certain aspects of this contract and may expedite others.***

## **WORK DESCRIPTIONS**

### **WEEDING**

Control weeds in planting beds by pulling entire plant and roots. Disturbed areas shall be raked level and mulch adjusted. Remove weeds as often as needed from all landscaped and hardscaped areas, R.P.Z. cages, around irrigation boxes, fire hydrants, light poles, traffic controllers, along curb lines (Curb line width shall be defined as inside of curb to where the curb meets the road surface.), carriage walks, traffic dividers, and drain holes. Remove weeds around planters in concrete seams, cracks, or in and around all hardscape elements.

Chemical weed control shall not be used without written approval of Engineer. No roto-tillers shall be used in any bed. All weeds shall be removed and legally disposed of off site.

The use of Round-Up & Round-Up type products followed by weed whipping around non-landscape elements may be allowed. Planting beds and turf areas may require the use of pre-emergent and post emergent herbicide. All work shall have prior approval of the Engineer.

### **LITTER REMOVAL**

Remove litter and other debris, including cigarette butts, plastic bags, and paper from all pre determined areas including but not limited to plazas, walks, curb lines, plants, shrubs, and trees a minimum of one (1) time a week at an appropriately spaced interval/ twelve months of the year. All drain inlets and weep holes shall be kept clean and draining freely. All weep holes shall be inspected once a month beginning with the commencement of the contract. Any problems are to be noted on the daily maintenance report and the Engineer is to be informed immediately. All concrete surfaces shall be kept free of litter, debris and glass. No debris may be left overnight, on weekends, or during holidays. Any damage to the hardscape, including auto accidents and graffiti shall be reported to the Engineer immediately. Any required clean-up associated with damage to the hardscape, including the clean-up of debris from auto accidents shall be considered incidental to this contract. The Contractor shall inform the Engineer of any rodent activity observed. The Contractor will instruct his/her staff not to disturb any bait placed within the landscaped area for rodent control. Furthermore, any dead rodents shall be removed by the Contractor. Objects too large to remove by hand shall be removed by the Contractor using equipment approved by the Engineer. All equipment, labor and material necessary to remove large objects shall be considered incidental to this item.

Any lane closures required to perform this work shall be done in accordance with Section 701 of the Standard Specification and the special provision for Traffic Control and Protection (Special). Arrow boards and safety cones shall be used whenever a crew is working in or around a planting area regardless of the type of work being performed. Traffic control required for this work will not be paid separate, but must be included in the contract unit price for TRAFFIC CONTROL AND PROTECTION (SPECIAL). Failure to follow these requirements may result in liquidated damages in accordance with Article 105.03 of the Standard Specifications.

Landscape Maintenance shall include inspection of winter treatment and salt fences.

During periods of snowfall the Engineer reserves the right to discontinue services in one or more locations.

## **TRANSPLANTING**

Transplant/dividing of perennials and bulbs shall be considered incidental to LANDSCAPE MAINTENANCE. The transplanting of shrubs in order to make space for new plant material shall be considered incidental. Transplanting of various perennial species shall also be considered incidental to the contract. The Contractor may be required within this contract to relocate plant material from one location to another within the project limits.

## **PERIOD OF ESTABLISHMENT**

Refer to Articles 253.14 and 254.09 in the Standard Specifications for Period of Establishment.

## **FLOWER AND FOLIAGE CARE**

The objective is to have all plants performing in peak condition, and to have a pleasing and orderly appearance.

### **Perennials:**

Routinely groom plants, deadhead spent flowers and remove browned leaves. Pinch back and stake plants as needed or as directed by Engineer. Do not allow seed heads to form unless as directed or for winter interest. Divide perennials and transplant at the direction of the Engineer. Apply a Bio-stimulant approved by the Engineer twice per season as recommended by the manufacturer. All associated costs are considered incidental to LANDSCAPE MAINTENANCE.

### **Shrubs and Trees:**

Routinely remove fallen or discolored leaves from shrubs and pick up twigs, branches and debris. Inspect and trim trees and shrubs per the schedule incorporated within this specification unless otherwise directed by the Engineer. Remove all dead, diseased, or crossed branches from trees and prune shrubs at the appropriated time so as not to interfere with blooming periods of the current season and subsequent seasons.

Root water all trees and shrubs as required by weather conditions. The Contractor's Arborist and Horticulturalist, shall submit a report to the Engineer prior to approval to begin LANDSCAPE MAINTENANCE noting specific plants to be provided 30 days of establishment watering paid for as part of LANDSCAPE PLANTINGS, and the date on which maintenance watering will begin. The Arborist, Horticulturalist, Contractor, and the Engineer will review the report to clarify the Contractor's responsibilities. Root watering may apply to automatically irrigated medians as well as non irrigated. The Contractor's Arborist is required to inspect all trees and monitor soil and moisture, and provide written weekly inspection forms to the Engineer a minimum of (1) time every two weeks including conditions and recommendations for watering and care. Non irrigated locations shall be provided with portable drip irrigation bags, one bag for trees under 4" cal., two bags for trees 5-8", or more as needed. Bags shall be filled regularly as approved by the Engineer and recommended by the Arborist.

Inspection, care, and watering recommendations for shrubs will be performed by the Contractor's Horticulturalist following methods described above for root watering of trees.

Trees and shrubs requiring straightening and staking from growing characteristics, shall be straightened as directed by the Engineer. The method of staking and or guying shall be approved prior to installation by the Engineer. The cost of straightening, staking and guying

shall be incidental to the cost of this pay item. Payment for trees which are required to be straightened as a result of major storm damage will be considered incidental to this pay item and shall require response by the Contractor within 24 hours of such occurrence.

### **SOIL MOISTURE MONITORING OF LANDSCAPED AREAS**

The Contractor is responsible for monitoring moisture in all planting beds in order to adjust irrigation and hand-watering. These beds include irrigated and non-irrigated landscaped areas. The Contractor shall be responsible for the adjustment of all irrigation controllers as well as the scheduling of all other watering. Any supplemental watering required in irrigated areas due to poor coverage or system shut down is considered incidental to landscape maintenance.

Using a probe or moisture meter, monitor the plant root balls and surrounding soils of each gateway to assure consistent and adequate moisture content in each gateway planting bed. Pay special attention to insure annuals have adequate moisture.

During the Spring (April 15 to May 31) and Autumn (September 15 to October 15), monitor landscaped areas a minimum of once per week.

During the Summer (June 1 to September 15) or when daytime temperatures exceed ninety (90) degrees Fahrenheit for more than two (2) consecutive days, monitor each location a minimum of twice per week.

Submit all moisture monitor readings on the Landscape Maintenance Report.

The Contractor shall immediately notify the Engineer, of excessive moisture or drought conditions. If the landscape area is irrigated, the Contractor shall make and record the necessary adjustments to the irrigation system in the Landscape Maintenance Report. All adjustments to the irrigation system will be incidental to the Landscape Maintenance line item. Any supplemental watering required in irrigated locations shall be incidental to Landscape Maintenance pay items. Supplemental watering of newly installed plant material until established is incidental to the cost of installation.

At the discretion of the Engineer an approved wetting agent or Bio-Stimulant shall be applied to those locations exhibiting problems with surface tension. All associated costs are considered incidental to LANDSCAPE MAINTENANCE.

Supplemental watering of newly installed plant material is incidental to the cost of installing these materials paid for as LANDSCAPE PLANTINGS. It is the responsibility of the Contractor to assure no plant material is lost due to lack of water. Any loss of existing or newly installed plant material determined by the Engineer to be due to lack of water is the responsibility of the Contractor to replace at no additional cost to this Contract.

### **WATERING METHODS**

The Contractor shall water plants to promote healthy growth and ensure that the soil is saturated thoroughly to a minimum depth of twelve (12) inches unless monitoring indicates a need for more or less water.

Water immediately if plants begin to wilt, or if top one (1) inch to two (2) inches of soil is dry. Avoid frequent, light water applications.



Water shall be applied in such a manner so as not to damage plant material. Water shall trickle slowly into soil and completely soak the root zone. An open end hose is unacceptable.

Water early in the day and apply water as close to soil as possible without washing out soil or mulch. Keep water off plant leaves as much as possible to minimize fungus problems. Thoroughly saturate all areas of planter soil within the bed, not just individual plants.

Water planting beds at a rate of approximately one (1) gallon per square foot. Apply extra water to raised or bermed ornamental trees and shrubs.

Water seeded areas at a rate of two (2) gallons per square yard in accordance with standard IDOT specifications unless otherwise directed by the Engineer.

Any damage to plant material due to incorrect watering shall be corrected or replaced at the Contractors expense, to the satisfaction of the Engineer.

All watering activities shall be included in the Landscape Maintenance Report and shall be submitted to the Engineer on a daily basis. This report shall be sent via e-mail, fax, or delivered to the Engineer. If the Landscape Maintenance Reports are not received within 24 hours, it will be assumed that no work was performed and no payment will be made.

#### **SYRINGING PLANTS/FLUSHING BEDS (APRIL 1 - MAY 1)**

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

Early Spring, when temperatures are anticipated to remain above thirty-five (35) degrees Fahrenheit for a minimum of twenty-four (24) hours and the threat of a snowfall and road salting has diminished, wash all plant material within planting beds with a gentle spray of water to remove accumulated salt on stems, bark, and crowns.

Flush beds between April 1 to May 1, by applying sufficient water two (2) to three (3) times for a period of one (1) week to flush salts from mulch, beds, and soil. Medians that possess an automated irrigation system may be syringed by running the irrigation system for sufficient duration to accomplish this task. Beds to be flushed shall be determined by the Engineer and shall be considered incidental to LANDSCAPE MAINTENANCE.

Submit a schedule for this work to the Engineer for approval no less than one week prior to the commencement of work.

Syringing plants/flushing beds shall be included on the Landscape Maintenance Report and shall be submitted to the Engineer. This report shall be sent via e-mail, fax, or delivered to the Engineer. If the Landscape Maintenance Report is not received, it will be assumed that no work was performed and no payment will be made.

Any lane closures required to perform this work shall be done in accordance with Section 701 of the Standard Specification and the special provision for Traffic Control and Protection (Special). Arrow boards and safety cones shall be used whenever a crew is working in or around a planting area regardless of the type of work being performed. Traffic control required for this work will not be paid separate, but must be included in the contract unit price for TRAFFIC CONTROL AND PROTECTION (SPECIAL). Failure to follow these requirements may result in liquidated damages in accordance with Article 105.03 of the Standard Specifications.

### **SPRING CLEAN-UP (APRIL 1 - MAY 1)**

In early April remove all dead stems and leaves and other debris from perennials, shrubs and ground covers. Trim dead tips of vines and ground covers. Cut back ornamental grasses to six (6) inches in height. Cut down any perennials left up over the winter to a height of six (6) inches or less and remove any dead leaves around the crowns of the plants.

Rake beds free of accumulated debris, dead leaves, and other material, leaving mulch in place and being careful not to damage emerging bulb foliage and flowers. Rake back any mulch that covers plant crowns.

After bulb flowers have faded, band or fold bulb foliage, tucking it under surrounding plants. During May 15 to June 30, or as directed by the Engineer, remove all bulb foliage, once it has completely died back, by cutting the foliage to the ground.

### **FALL CLEAN-UP (OCTOBER 15 - NOVEMBER 15)**

All clean up work shall start October 15 depending upon weather conditions and condition of plant material. All work shall be completed by the end of November 15, depending upon the weather conditions and the condition of plant material. Perennials shall be cut back at the end of the season as soon as all foliage has died back or at the discretion of the Engineer.

#### **Perennials**

Cut back plants leaving three (3) to four (4) inches height foliage. Do not cut into plant crowns.

Do not cut back Asters until they have finished blooming.

Adjust and add mulch as needed to maintain a two (2) inch deep layer around all perennials.

**DO NOT** cut back any perennial plant with winter interest potential or other plant material as directed by the Engineer including:

Ornamental Grasses

Echinacea flower heads

Rudbeckia flower heads

Roses

#### **Roses**

Cut any dead or broken branches down to base of plant.

Remove all plant litter including any rose leaves, stems, flower petals, and any other plant debris in the bed.

Do not cut off rose hips.

Remove all weeds from inside rose shrubs.

Adjust and add mulch as needed to maintain a two (2) or three (3) inch deep layer of mulch around roses.

Mound mulch slightly around base of plant. Do not bury stems or branches. Do not mulch over any plant debris or litter.

#### Trees and Shrubs

Remove any broken or dead branches.

Remove all leaves, stems, weeds and plant debris.

Adjust and add mulch as needed to maintain a three (3) inch deep layer around all trees and shrubs. Adjust mulch to saucer shape to prevent covering basal flare of trunks and stems.

#### **GYPSUM APPLICATION**

Perform salt damage control to reduce the stress of winter road salting operations on plant materials. Apply gypsum at a rate of forty (40) pounds per one thousand (1000) square feet or as directed by the Engineer.

Apply gypsum to entire bed and rake into the top layer of mulch and soil, using a hand-held cultivator. Be careful not to disturb roots by scratching too deeply. Wash or brush gypsum and dust off plants and concrete surfaces.

The Contractor is responsible for calculating quantities required based upon the application rate listed above. The Contractor shall submit a record of square rate of application footage and amounts applied in the Landscape Maintenance Report.

Contractor shall submit a schedule and notify the Engineer seventy-two (72) hours in advance of the gypsum application.

Gypsum: Pelletized gypsum, consisting of calcium sulfate, calcium, sulphur, and water soluble binder, with a maximum moisture content of one percent (1%), and ninety-five percent (95%) finished pellet size passing between #4 and #14 mesh, gray in color, such as Ben Franklin Agricultural Gypsum, or approved equal as manufactured by Industrial Gypsum Division United States Gypsum Company (630) 904-3580, or Sof-n-Soil Calfate Products, Distributors (630) 231-3055.

Furnishing and placing of gypsum will be considered incidental to LANDSCAPE MAINTENANCE.

#### **GENERAL CLEAN-UP**

The Contractor shall leave work areas clean and in good condition. Exposed concrete shall be free of mulch, soil, litter, or other debris. No debris may be left in the street or on the pathways or surrounding concrete areas overnight, on the weekend, or holiday period. The Contractor shall legally dispose of all accumulated debris, dead leaves, twigs, and other material off site.

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 Work Zone Traffic Control and Protection. Work Zone Traffic Control and Protection will be paid for under the contract lump sum unit price for TRAFFIC CONTROL AND PROTECTION.

### **INTEGRATED PEST MANAGEMENT INSPECTION**

Contractor's Horticulturist shall inspect all plants and beds for pests and diseases on a weekly basis. Contractor shall identify and monitor pest and diseases levels and determine action required to maintain the good appearance, health and, top performance of all plant material.

Inspection findings and recommendations shall be included in the weekly Landscape Maintenance Report and submitted within twenty-four (24) hours of inspection. This report shall be sent via e-mai, fax, or delivered to the Engineer. The inspection for integrated pest management shall be considered incidental to LANDSCAPE MAINTENANCE. The recommendations for action by the Contractor's Horticulturist shall be reviewed by the Engineer for approval/rejection. All approved corrective activities will be considered incidental to LANDSCAPE MAINTENANCE.

### **FAILURE TO COMPLETE LANDSCAPE MAINTENANCE**

When the Engineer is notified, or determines that the Contractor fails to complete the work as specified in the Special Provision for LANDSCAPE MAINTENANCE, the Engineer will notify the Contractor in writing for corrective action/measure within a specified time. If the Contractor fails to provide corrective action within the specified time, a daily monetary deduction will be imposed for each calendar day or fraction thereof the conditions exists. The daily monetary deduction will be \$1,000 or .05 percent of the awarded contract value, whichever is greater.

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.

### **METHOD OF MEASUREMENT**

LANDSCAPE MAINTENANCE operations shall be measured for payment on a monthly basis, commencing with the end of the Initial Maintenance (Substantial Completion of Spring Planting as determined by the Engineer), for the complete care of Landscape Plantings as specified herein.

### **BASIS OF PAYMENT**

This work shall be paid at the contract unit price per MONTH for LANDSCAPE MAINTENANCE, which price shall include all materials and labor required to complete the work for the period specified herein. A month is defined as thirty (30) calendar days or the percentage there of.

### **BACKFLOW PREVENTER (RPZ), 2 INCH**

Description: 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.

All elements of the Contractor's design shall allow for the future build out of the northeast (NE) and southwest (SW) quadrants (by a future contract), as shown on the drawings. This contract's installation shall be designed such that the future installation will not require the upgrade of any components installed by this contract and the future installation can be connected to this contract's installation with a minimal disturbance to the surrounding terrain and infrastructure.

The areas to be irrigated in the future consist of 871 square yards at the northeast quadrant and 956 square yards in the southwest quadrant. In addition to the 1,684 square yards, at the southeast quadrant, and the 1,699 square yards, at the northwest quadrant, to be irrigated by this contract.

All design and work performed by this contract to provide an installation that is ready for the future expansion, specified above, will not be measured for payment but will be considered as included in the cost of the BACK BACKFLOW PREVENTERS (RPZ) installed by this contract.

General Requirements: 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

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 complete with shutoff valves, wye strainers shall be FEBCO Model 650 or approved equals 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. Approved Equal

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 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 PREVENTER (RPZ), 2 INCH will be measured per each installed.

Basis of Payment: 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.

### **CAST-IN-PLACE DETECTABLE WARNING SURFACE**

Description: This Work consists of providing all labor, materials, tools, and equipment necessary to install a cast in place detectable warning tile at concrete curb ramps for people with disabilities, having a surface color and a truncated dome pattern, as indicated on the Plans and as directed by the Commissioner.

#### Submittals:

- A. **Product Data:** Submit manufacturer's literature describing products, installation procedures and routine maintenance.
- B. **Samples for Verification Purposes:** Submit two (2) samples minimum 8" square of the kind proposed for use.
- C. Layout drawings are required for products specified showing plans of placement including joints, sizes, types, and quantity of tiles to be used at each ramp, and an outline of installation materials and procedures.
- D. **Maintenance Instructions:** Submit copies of manufacturer's specified maintenance practices for each type of tactile system and accessory as required.

#### Quality Assurance:

- A. Provide tactile system and accessories as produced by a suggested manufacturer.
- B. **Installer's Qualifications:** Engage an experienced Installer certified in writing by tactile manufacturer as qualified for installation, who has successfully completed installations similar in material, design, and extent to that indicated for Project.
- C. **Americans with Disabilities Act (ADA):** Provide tactile warning surfaces which comply with the detectable warnings on walking surfaces section of the Americans with Disabilities Act (Title 49 CFR TRANSPORTATION, Part 37.9 STANDARDS FOR ACCESSIBLE TRANSPORTATION FACILITIES, Appendix A, Section 4.29.2 DETECTABLE WARNINGS ON WALKING SURFACES).
- D. **California Code of Regulations (CCR):** Provide only approved DSAAC detectable warning products as provided in the California Code of Regulations (CCR). Title 24, Part 1, Articles 2, 3 and 4 and Part 2, Section 205 definition of "Detectable Warning". Section 1127B.5 for "Curb Ramps" and Section 1133B.8.5 for "Detectable Warnings at Hazardous Vehicle Area's".

- E. The tile must incorporate an in-line dome pattern of truncated domes 0.2" in height, 0.9" diameter at the base, and 0.4" diameter at top of dome spaced 2.35" nominal as measured on a diagonal and 1.70" nominal as measured side by side. For wheelchair safety the field area must consist of a non-slip surface with a minimum of 40 - 90° raised points 0.045" high, per square inch;
- F. **Dimensions:** Tile Assemblies must be held within the following dimensions and tolerances:
- Square Tile: 24"x 24" nominal square, (Length and Width) 12" x 24" nominal triangle, Plus or minus 1/16".
- Radius Tile: 4', 6', 8', 10', 12', 15' nominally, (Radii) Plus or minus 1/16".
- Depth: 1.500" + 5% max.
- Face Thickness: 0.1875 + 5% max.
- Warpage of Edge: + 0.5% max.
- G. **Other Characteristics of Tile:**
1. Water Absorption: + 0.35%, ASTM-D 570
  2. Slip Resistance: wet/dry static co-efficient of friction + 0.90 on top of domes and field area, ASTM-C 1028
  3. Compressive Strength: + 18,000 psi, ASTM-D 695-91
  4. Tensile Strength: + 10,000 psi, ASTM-D 638-91
  5. Flexural Strength: + 24,000 psi ASTM - C293-94
  6. Chemical Stain Resistance: +1% hydrochloric acid, urine, calcium chloride, stamp pad ink, gum and red aerosol paint, ASTM-D 543-87 to withstand without discoloration or staining.
  7. Abrasive Wear: BYK - Gardner Tester ASTM-D 2486 with reciprocating linear motion of 37 + cycles per minute over a 10" travel. The abrasive medium, a 40-grit Norton Metallite sand paper, to be fixed and leveled to a holder. The combined mass of the sled, weight and wood block to be 3.2 lb. Average wear depth must not exceed 0.030 after 1000 abrasion cycles measured on the top surface of the dome representing the average of three measurement locations per sample.
  8. Fire Resistance: flame spread - 25, ASTM E84.



9. Gardner Impact to geometry "GE" of the standard when tested by ASTM-D 5420-93 to have a mean failure energy expressed as a function of specimen thickness of not less than 450 in. 1bf/in. A failure is noted if a hairline fracture is visible in the specimen.
10. Accelerated Weathering of Tile when tested by ASTM-G26-95 for 2000 hours must exhibit the following result - no deterioration, fading or chalking of surface of tile.

H. **Suggested Manufacturers:**

"EZ set" tile as manufactured by E-Z Set Corporation, and distributed by Traffic Control Corporation, 780 W. Belden Ave, STE D, Addison, IL, 630-543-1300.

"Detectile" as manufactured by Bindan Corporation, P.O Box 3513, Oak Brook, IL 60523, 630-734-0277, 630-734-0278 (fax)

Delivery, Storage and Handling:

- A. Deliver detectable warning tiles to worksite in such quantities and at such times to assure continuity of installation. Handle and transport units in a position consistent with their shape and design in order to avoid excessive stresses or damage.
- B. Store units at worksite to prevent cracking, distorting, warping, staining or other physical damage and so that markings are visible.
- C. Keep panels under cover and protected until installed.
- D. Deliver ABS anchors in sufficient quantity for the work to be done before the start of construction.

**Guarantee:** Cast-in-place detectable warning tiles must be guaranteed in writing for a period of five years from date of final completion. The guarantee includes defective work, breakage, deformation, and loosening of tiles.

Materials:

**Reinforced Ceramic Cement (RCC):**

- A. **Proprietary Ceramic Cement Blend:** Use only one brand, type and source of supply of cement throughout RCC production unless noted otherwise.
- B. **Aggregates:** Proprietary blend per manufacturer.
- C. **Water:** Potable, free from foreign materials in amounts harmful to concrete.
- D. **Admixtures:** Conform to ASTM C260 for air entrapment, ASTM C494 for chemical admixtures, or ASTM C618 for fly ash or natural pozzolan admixtures, at manufacturers option. Do not use admixtures that contain more than 0.1% chloride ions.

**E. Coloring Agent:**

1. Conform to ASTM C979, ultraviolet resistant, high temperature stable, harmless to concrete set or strength.
2. The amount of coloring agent must not exceed 10% of the cement weight.
3. Color: Federal Brick Red 30166 Color must be homogeneous throughout the tile.

**Anchors and Subsystems:**

- A. Each RCC panel is to be attached to the supporting concrete with a minimum of 2-4 4 ABS anchors in the top horizontal plane and in the preformed holes.

General Requirements: This Work consists of casting in place detectable warning tiles on concrete curb ramps for people with disabilities. This Work will be done in coordination with PCC Sidewalk, where shown on the Plans or as directed by the Commissioner. Detectable warning tiles must be installed across the width of the depressed curb, perpendicular to the direction of travel and per the standard details.

Site Conditions: Environmental Conditions and Protection: Maintain minimum temperature of 40 degrees F in spaces to receive detectable warning tiles for at least 48 hours prior to installations, during installation, and for not less than 48 hours after installation. Store detectable tile material in spaces where they will be installed for at least 48 hours before beginning installation. Subsequently, maintain minimum temperature of 40 degrees F in areas where work is completed.

Extra Stock: Deliver extra stock to storage area designated by engineer. Furnish new materials from same manufactured lot as materials installed and enclose in protective packaging with appropriate identification for cast-in-place detectable warning tiles. Furnish not less than two (2)% of the supplied materials for each type, color and pattern installed.

Installation:

- A. The physical characteristics of the concrete must be consistent with the contract specifications while maintaining a slump range of 4 - 7 to permit solid placement of the Cast-In-Place Tile System. An overly wet mix will cause the Cast-In-Place System to float, therefore under these conditions suitable weights such as 2 concrete blocks or sandbags (25 lb) must be placed on each tile.
- B. PRIOR TO PLACEMENT OF THE CAST-IN-PLACE SYSTEM, THE LAYOUT DRAWINGS AS SPECIFIED IN THE SUBMITTAL SECTION MUST BE REVIEWED.
- C. The concrete pouring and finishing operations require typical mason's tools, however, a 4' long level with electronic slope readout, 25 lb. weights, vibrator and small sledge hammer with 2" x 6" x 20" wood tamping plate are specific to the installation of the Cast-In Place System.

- D. The concrete must be poured and finished, true and smooth to the required dimensions and slope prior to tile placement. Immediately after finishing the concrete, the electronic level should be used to check that the required slope is achieved. The tile must be placed true and square to the curb edge in accordance with the contract drawings. The Cast-In-Place Tiles must be tamped or vibrated into the fresh concrete to ensure that the field level of tile is flush to the adjacent concrete surface. The contract drawings indicate that the tile field level (base of truncated dome) is flush to adjacent surfaces to permit proper water drainage and eliminate tripping hazards between adjacent finishes. The tolerance for elevation differences between tile and adjacent surface is 1/16". Place the second panel next to the first, leaving no gap (tiles must be abutted to one another) and press into the wet concrete using a twisting back and forth motion. Be certain that the second panel is even and level with the first and with the surrounding concrete.
- E. Immediately after tile placement, the tile elevation is to be checked to adjacent concrete. The tile elevation and slope should be set consistent with contract drawings to permit water drainage to curb as the design dictates.

While concrete is workable a steel trowel must be used to trowel the concrete around the tile perimeter to the field level of the tile. - Trowel concrete flat, remove any excess concrete and leaving no gap (tiles must be abutted to one another) between the panels. Apply broom finish or other recommended finish to the area immediately surrounding the panels.

- F. Following tile placement, review installation tolerances to contract drawings and adjust tile before the concrete sets, 2 suitable weights of 25 lb each must be placed on each tile as necessary to ensure solid contact of tile underside of concrete.
- G. Remove the protective plastic coating and insert one ABS anchor into each of the preformed holes, being certain that the anchors are inserted completely, flush to the panel surface. Tap the top of each anchor 5-6 times using the trowel handle. This will insure good contact of the concrete with the anchor.
- H. During and after the tile installation and the concrete curing stage, it is imperative that there is no walking, leaning or external force placed on the tile to rock the tile, causing a void between the underside of tile and concrete.
- I. Following the curing of the concrete, the protective plastic wrap is to be removed from the tile face by cutting the plastic with a sharp knife tight to the concrete/tile interface. If concrete bleeding occurs, a wire brush will clean the residue without damage to the tile surface.

Cleaning And Protecting:

- A. Protect tiles against damage during construction period to comply with tile manufacturer's specification. Tiles damaged prior to placement will be replaced at the Contractor's cost.

- B. Protect tiles against damage from rolling loads following installation by covering with plywood or hardwood.
- C. Clean tiles not more than four days prior to date scheduled for inspection intended to establish date of substantial completion in each area of project. Clean tile by method specified by tactile tile manufacturer.

Method of Measurement: Detectable Warning Tile will be measured for payment in place and the area computed in square feet.

Basis of Payment: The Work under this item will be paid for at the Contract Unit Price per square foot as shown in the Schedule of Unit Prices for CAST-IN-PLACE DETECTABLE WARNING SURFACE, which price will include all labor, installation, equipment, materials and incidental work necessary to complete the Work as specified.

## **SOIL CONDITIONER, 3 INCH**

### **DESCRIPTION**

This work shall consist of preparation of the planting areas to receive soil amendments, including placement and incorporation of an approved soil conditioner and an approved soil amendment into the landscape planting beds.

### **GENERAL REQUIREMENTS**

The soil conditioner shall consist of ground southern yellow pine bark, composted rice hulls, organic compost, approved nutrient additives and supplements. The Contractor shall submit a 5 lb. bag sample to the Engineer for approval prior to the delivery and installation of this material.

### **PREPARATION**

The soil conditioner installation shall only begin after all removals, including vegetation removals, are completed. Clean planting areas of all trash and debris before placement of the approved soil conditioner.

Remove and legally dispose of all removals and debris offsite in accordance with Article 202.03

In planting zones, the Contractor shall remove existing turf or vegetation to a soil depth of 1”.

Prepare soil surface by gently loosening the top 6” of the existing soil.

Apply a 3” deep layer of soil conditioner within the planting areas. The Engineer will verify that the proper soil conditioner depth has been applied. After verification of proper depth, the Contractor shall completely incorporate the soil conditioner into the loosened topsoil by tilling.

Rake smooth and finish grade all planted areas. This work shall be considered included in the cost of SOIL CONDITIONER, 3 INCH. Grading shall be to a tolerance of +/- 0.10 foot of the design grades. Any grade disturbed by irrigation installation or other operations shall be restored to finished grade and raked smooth at no additional cost.

All debris, litter, tire tracks, and unintended materials shall be removed, swept, or washed off of all landscape, adjacent wall and concrete surfaces, curbs, gutters, and pavement on a daily basis, to the approval and directive of the Engineer.

### **METHOD OF MEASUREMENT**

SOIL CONDITIONER, 3 INCH will be measured in square yards.

### **BASIS OF PAYMENT**

The work under this item will be paid for at the contract unit price per square yard for SOIL CONDITIONER, 3 INCH, which price shall be payment in full for all materials, equipment, and labor required to complete this work as specified herein and as approved by the Engineer. All turf and vegetation removal required for installation of SOIL CONDITIONER, 3 INCH is considered included in this item.

### **WATER VALVE, 2 INCH**

Description: 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 lid. Curb stop and box shall be equipped with a shut-off rod, typically 2 inches shorter than the curb box at its maximum extension.

Method of Measurement: WATER VALVE, 2 INCH will be measured on a per each basis.

Basis of Payment: WATER VALVE, 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 SERVICE LINE**

Description: 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.

General Requirements: 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. The warning tape shall be Presco Products Detectable Underground Utility Marking Tape # D2105-Blue or approved equivalent.

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 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" 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, 4 inch diameter.

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

### **Additional Conduits**

Water service line shall also include the installation of additional conduits in trench. At all locations one (1) three (3") inch PVC Conduit Schedule #80 and one (1) three-quarter (3/4") inch Schedule #80 shall be installed.

At locations where the Water Service Line is in sleeves the three-quarter (3/4) inch Schedule #80 shall be installed in the sleeve.

Polyvinyl chloride (PVC) conduit shall conform to the requirements of National Electrical Manufacturers Association Standard, Publication Number TC2 for EPC-40.

Method of Measurement: WATER SERVICE LINE will be measured in per linear foot basis.

Basis of Payment: WATER SERVICE LINE 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.

### **CHAIN LINK FENCE, 4' (SPECIAL)**

Description. This work consists of fabricating, erecting, and maintaining a temporary fence to maintain access control to I-90/94 from the frontage roads at the locations shown in the contract plans, according to the details in the plans, as directed by the Engineer, and according to Section 664 of the Standard Specifications and as modified herein.

General Requirements. The fence fabric must meet the requirements of Section 1006.27.(a).b of the Standard Specifications.

Posts must meet the requirements of Section 1006.27.(b) of the Standard Specifications. The fence posts are to be driven directly into the finished embankment, and are not to be set in concrete. A maximum distance of 7-feet center to center will be allowed between posts.

Locations and sizes of existing gates in the existing access control fence must be maintained. Gate locations may be adjusted to better match gaps in fluted kneewall for final gate locations as directed by the Engineer.

The Contractor may re-use parts from the removed chain link fence if the parts are determined to be adequate to allow the fence to function properly, as decided by the Engineer.

Method of Measurement. CHAIN LINK FENCE, 4' (SPECIAL) will be measured in feet in place along the top of the fence from center to center of end posts.

Basis of Payment. This work will be paid for at the contract unit price per foot for CHAIN LINK FENCE, 4' (SPECIAL), which price is payment in full for all shop and fabrication drawings, materials, fabricating and installing the complete fence including posts, tension wire, fittings, chain link fabric, anchorage, hardware, maintenance and other incidentals for the fence and gates.

### **WATER METER IN VAULT, 2 INCH**

Description: 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 (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, 2 INCH will be measured on a per each basis.

Basis of Payment: 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 TAP, 2 INCH**

Description: This work shall consist paying for and obtaining a water main tap permit from the City of Chicago Department of Water Management (CDWM), scheduling 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.

General Requirements: This work must be performed by a City of Chicago Licensed 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 based on the areas of to-be-built and future irrigation as covered in the specification for IRRIGATION SYSTEM, 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 TAP, 2 INCH will be measured on a per each basis.

Basis of Payment: 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.

## **COMBINATION CURB AND GUTTER, TYPE B-V.12**

Description: This work shall be constructed in accordance with Section 606 of the Standard Specifications, State Standard 606001, special drawings in the plans, and to the lines, grades and cross section shown on the plans and as directed by the Engineer.:

Curb height for this item shall vary to match the adjacent curb heights where this item meets existing curb.

Measurement and Payment: The work shall be measured for payment at the contract unit price per foot for COMBINATION CONCRETE CURB AND GUTTER, TYPE B-V.12, which price shall be considered payment in full to perform the work as specified.

**RAILROAD PROTECTIVE LIABILITY INSURANCE (5 AND 10) (BDE)**

Metra over 35<sup>th</sup> Street (Chicago)  
 Effective: January 1, 2006

Description. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications, except the limits shall be a minimum of \$5,000,000 combined single limit per occurrence for bodily injury liability and property damage liability with an aggregate limit of \$10,000,000 over the life of the policy. A separate policy is required for each railroad unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
METRA ** 547 W. Jackson Boulevard Chicago, IL 60661	107 Trains/day@55MPH	0
DOT/AAR No.: 608813W RR Division: RID	RR Mile Post: 3.15 RR Sub-Division: Joliet	
For Freight/Passenger Information Contact: Tony Ognibene For Insurance Information Contact: Kerry Brunette		Phone: 312-322-8006 Phone: 312-322-6991

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*“The commuter Rail Division of the Regional Transportation Authority and its affiliated separate public corporation known as the Northeast Illinois Regional Transportation Authority, both operating under the service mark METRA, as now exists or may thereafter be constituted or acquired including their interest in partnership.”*

Approval of Insurance. The original and one certified copy of each required policy shall be submitted to the following address for approval:

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

The Contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Engineer evidence that the required insurance has been approved by the railroad(s). The Contractor shall also provide the Engineer with the expiration date of each required policy.

Basis of Payment. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

## **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 (Al<sub>2</sub>O<sub>3</sub>), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide (MgO), maximum 0.4 percent sulfur trioxide (SO<sub>3</sub>), 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 (DBE)**

Effective: September 1, 2000

Revised: November 1, 2008

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

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

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

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

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

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. 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 **5.0%** 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.

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

BIDDING PROCEDURES. 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 companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (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.

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the full value of all such DBE trucks operated using DBE employed drivers. Goal credit will be limited to the value of the reasonable fee or commission received by the DBE if trucks are leased from a non-DBE company.
- (e) DBE as a material supplier:

- (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
- (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
- (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

GOOD FAITH EFFORT PROCEDURES. If the bidder cannot obtain sufficient DBE commitments to meet the contract goal, the bidder must document in the Utilization Plan the good faith efforts made in the attempt to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which could reasonably be expected to obtain sufficient DBE participation. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts are not good faith efforts; rather, the bidder is expected to have taken those efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
  - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
  - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
  - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
  - (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the

information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.

- b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
  - (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
  - (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
  - (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that a good faith effort has not been made, the Department will notify the bidder of that preliminary determination by contacting the responsible company official designated in the Utilization Plan. The preliminary determination shall include a statement of reasons why good faith efforts have not been found, and may include additional good faith efforts that the bidder could take. The notification will designate a five working day period during which the bidder shall take additional efforts. The bidder is not limited by a statement of additional efforts, but may take other action beyond any stated additional efforts in order to obtain additional DBE commitments. The bidder shall submit an amended Utilization Plan if additional DBE commitments to meet the contract goal are secured. If additional DBE commitments sufficient to meet the contract goal are not secured, the bidder shall report the final good faith efforts made in the time allotted.

All additional efforts taken by the bidder will be considered as part of the bidder's good faith efforts. If the bidder is not able to meet the goal after taking additional efforts, the Department will make a pre-final determination of the good faith efforts of the bidder and will notify the designated responsible company official of the reasons for an adverse determination.

- (c) The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five working days after the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The pre-final determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. In addition, the request shall be considered a consent by the bidder to extend the time for award. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the

work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. If a DBE listed in the Utilization Plan is terminated for reasons other than convenience, or fails to complete its work on the contract for any reason, the Contractor shall make good faith efforts to find another DBE to substitute for the terminated DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, but only to the extent needed to meet the contract goal or the amended contract goal. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau of Small Business Enterprises and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau of Small Business Enterprises 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 therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (d) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (e) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

## **EQUIPMENT RENTAL RATES (BDE)**

Effective: August 2, 2007

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.

$$\text{FHWA hourly rate} = (\text{monthly rate}/176) \times (\text{model year adj.}) \times (\text{Illinois adj.}) + \text{EOC}$$

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

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.”

## **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.

#### **POLYUREA PAVEMENT MARKING (BDE)**

Effective: April 1, 2004

Revised: January 1, 2007

Description. This work shall consist of furnishing and applying pavement marking lines.

The type of polyurea pavement marking applied will be determined by the type of reflective media used. Polyurea Pavement Marking Type I shall use glass beads as a reflective media. Polyurea Pavement Marking Type II shall use a combination of composite reflective elements and glass beads as a reflective media.

Polyurea-based liquid pavement markings shall only be applied by Contractors on the list of Approved Polyurea Contractors maintained by the Engineer of Operations and in effect on the date of advertisement for bids.

Materials. Materials shall meet the following requirements:



- (a) Polyurea Pavement Marking. The polyurea pavement marking material shall consist of 100 percent solid two part system formulated and designed to provide a simple volumetric mixing ratio of two components (must be two or three volumes of Part A to one volume of Part B). No volatile or polluting solvents or fillers will be allowed.
- (b) Pigmentation. The pigment content by weight (mass) of component A shall be determined by low temperature ashing according to ASTM D 3723. The pigment content shall not vary more than  $\pm$  two percent from the pigment content of the original qualified paint.

White Pigment shall be Titanium Dioxide meeting ASTM D 476 Type II, Rutile.

Yellow Pigment shall be an Organic Yellow and contain no heavy metals.

- (c) Environmental. Upon heating to application temperature, the material shall not exude fumes which are toxic or injurious to persons or property.
- (d) Daylight Reflectance. The daylight directional reflectance of the cured polyurea material (without reflective media) shall be a minimum of 80 percent (white) and 50 percent (yellow) relative to magnesium oxide when tested using a color spectrophotometer with a 45 degrees circumferential /zero degrees geometry, illuminant C, and two degrees 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. In addition, the color of the yellow polyurea shall visually match Color Number 33538 of Federal Standard 595a with chromaticity limits as follows:

X	0.490	0.475	0.485	0.539
Y	0.470	0.438	0.425	0.456

- (e) Weathering Resistance. The polyurea marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness to an aluminum alloy panel (Federal Test Std. No. 141, Method 2013) and allowed to cure for 72 hours at room temperature, shall be subjected to accelerated weathering for 75 hours. The accelerated weathering shall be completed by using the light and water exposure apparatus (fluorescent UV - condensation type) and tested according to ASTM G 53.

The cycle shall consist of four hours UV exposure at 122 °F (50 °C) and four hours of condensation at 104 °F (40 °C). UVB 313 bulbs shall be used. At the end of the exposure period, the material shall show no substantial change in color or gloss.

- (f) Dry Time. The polyurea pavement marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness and with the proper saturation of reflective media, shall exhibit a no-tracking time of ten minutes or less when tested according to ASTM D 711.
- (g) Adhesion. The catalyzed polyurea pavement marking materials when applied to a 4 x 4 x 2 in. (100 x 100 x 50 mm) concrete block, shall have a degree of adhesion which results in a 100 percent concrete failure in the performance of this test.

The concrete block shall be brushed on one side and have a minimum strength of 3500 psi (24,100 kPa). A 2 in. (50 mm) square film of the mixed polyurea shall be applied to the brushed surface and allowed to cure for 72 hours at room temperature. A 2 in. (50 mm) square cube shall be affixed to the surface of the polyurea by means of an epoxy glue. After the glue has cured for 24 hours, the polyurea specimen shall be placed on a dynamic testing machine in such a fashion so that the specimen block is in a fixed position and the 2 in. (50 mm) cube (glued to the polyurea surface) is attached to the dynamometer head. Direct upward pressure shall be slowly applied until the polyurea system fails. The location of the break and the amount of concrete failure shall be recorded.

(h) Hardness. The polyurea pavement marking materials when tested according to ASTM D 2240, shall have a shore D hardness of between 70 and 100. Films shall be cast on a rigid substrate at 14 to 16 mils (0.35 to 0.41 mm) in thickness and allowed to cure at room temperature for 72 hours before testing.

(i) Abrasion. The abrasion resistance shall be evaluated according to ASTM D 4060 using a Taber Abrader with a 1,000 gram load and CS 17 wheels. The duration of the test shall be 1,000 cycles. The loss shall be calculated by difference and be less than 120 mgs. The tests shall be run on cured samples of polyurea material which have been applied at a film thickness of 14 to 16 mils (0.35 to 0.41 mm) to code S-16 stainless steel plates. The films shall be allowed to cure at room temperature for at least 72 hours and not more than 96 hours before testing.

(j) Reflective Media. The reflective media shall meet the following requirements:

(1) Type I - The glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications and the following requirements:

a. First Drop Glass Beads. The first drop glass beads shall be tested by the standard visual method of large glass spheres adopted by the Department. The beads shall have a silane coating and meet the following sieve requirements:

U.S. Standard Sieve Number	Sieve Size	% Passing By Weight (mass)
12	1.70 mm	95-100
14	1.40 mm	75-95
16	1.18 mm	10-47
18	1.00 mm	0-7
20	850 µm	0-5

b. Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B.

(2) Type II - The combination of microcrystalline ceramic elements and glass beads shall meet the following requirements:

a. First Drop Glass Beads. The first drop glass beads shall meet the following requirements:

1. Composition. The elements shall be composed of a titania opacified ceramic core having clear and or yellow tinted microcrystalline ceramic beads embedded to the outer surface.
  2. Index of Refraction. All microcrystalline reflective elements embedded to the outer surface shall have an index of refraction of 1.8 when tested by the immersion method.
  3. Acid Resistance. A sample of microcrystalline ceramic beads supplied by the manufacturer, shall show resistance to corrosion of their surface after exposure to a one percent solution (by weight (mass)) of sulfuric acid. Adding 0.2 oz (5.7 ml) of concentrated acid into the water shall make the one percent acid solution. This test shall be performed by taking a 1 x 2 in. (25 x 50 mm) sample and adhering it to the bottom of a glass tray and placing just enough acid solution to completely immerse the sample. The tray shall be covered with a piece of glass to prevent evaporation and allow the sample to be exposed for 24 hours under these conditions. The acid solution shall be decanted (do not rinse, touch, or otherwise disturb the bead surfaces) and the sample dried while adhered to the glass tray in a 150 °F (66 °C) oven for approximately 15 minutes. Microscope examination (20X) shall show no white (corroded) layer on the entire surface.
- b. Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B or the following manufacturer's specification:

1. Sieve Analysis. The glass beads shall meet the following sieve requirements:

U.S. Standard Sieve Number	Sieve Size	% Passing By Weight (mass)
20	850 μm	100
30	600 μm	75-95
50	300 μm	15-35
100	150 μm	0-5

The manufacturer of the glass beads shall certify that the treatment of the glass beads meets the requirements of the polyurea manufacturer.

2. Imperfections. The surface of the glass beads shall be free of pits and scratches. The glass beads shall be spherical in shape and shall contain a maximum of 20 percent by weight (mass) of irregular shapes when tested by the standard method using a vibratile inclined glass plate as adopted by the Department.
  3. Index of Refraction. The index of refraction of the glass beads shall be a minimum of 1.50 when tested by the immersion method at 77 °F (25 °C).
- (k) Packaging. Microcrystalline ceramic reflective elements and glass beads shall be delivered in approved moisture proof bags or weather resistant bulk boxes. Each carton shall be legibly marked with the manufacturer, specifications and type, lot number, and the

month and year the microcrystalline ceramic reflective elements and/or glass beads were packaged. The letters and numbers used in the stencils shall be a minimum of 1/2 in. (12.7 mm) in height.

- (1) Moisture Proof Bags. Moisture proof bags shall consist of at least five ply paper construction unless otherwise specified. Each bag shall contain 50 lb (22.7 kg) net.
  - (2) Bulk Weather Resistance Boxes. Bulk weather resistance boxes shall conform to Federal Specification PPP-8-640D Class II or latest revision. Boxes are to be weather resistant, triple wall, fluted, corrugated-fiber board. Cartons shall be strapped with two metal straps. Straps shall surround the outside perimeter of the carton. The first strap shall be located approximately 2 in. (50 mm) from the bottom of the carton and the second strap shall be placed approximately in the middle of the carton. All cartons shall be shrink wrapped for protection from moisture. Cartons shall be lined with a minimum 4 mil polyester bag and meet Interstate Commerce Commission requirements. Cartons shall be approximately 38 x 38 in. (1 x 1 m), contain 2000 lb (910 kg) of microcrystalline ceramic reflective elements and/or glass beads and be supported on a wooden pallet with fiber straps.
- (l) Packaging. The material shall be shipped to the job site in substantial containers and shall be plainly marked with the manufacturer's name and address, the name and color of the material, date of manufacture, and batch number.
- (m) Verification. Prior to approval and use of the polyurea pavement marking materials, the manufacturer shall submit a notarized certification of an independent laboratory, together with the results of all tests, stating these materials meet the requirements as set forth herein. The certification test report shall state the lot tested, manufacturer's name, brand name of polyurea and date of manufacture. The certification shall be accompanied by one 1 pt (1/2 L) samples each of Part A and Part B. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B.
- After approval by the Department, certification by the polyurea manufacturer shall be submitted for each batch used. New independent laboratory certified test results and samples for testing by the Department shall be submitted any time the manufacturing process or paint formulation is changed. All costs of testing (other than tests conducted by the Department) shall be borne by the manufacturer.
- (n) Acceptance samples. Acceptance samples shall consist of one 1 pt (1/2 L) samples of Part A and Part B, of each lot of paint. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B. The samples shall be submitted to the Department for testing, together with a manufacturer's certification. The certification shall state the formulation for the lot represented is essentially identical to that used for qualification testing. All, acceptance samples will be taken by a representative of the Department. The polyurea pavement marking materials shall not be used until tests are completed and they have met the requirements as set forth herein.
- (o) Material Retainage. The manufacturer shall retain the test sample for a minimum of 18 months.

Equipment. The polyurea pavement marking compounds shall be applied through equipment specifically designed to apply two component liquid materials, glass beads and/or reflective elements in a continuous and skip-line pattern. The two-component liquid materials shall be applied after being accurately metered and then mixed with a static mix tube or airless impingement mixing guns. The static mixing tube or impingement mixing guns shall accommodate plural component material systems that have a volumetric ratio of 2 to 1 or 3 to 1. This equipment shall produce the required amount of heat at the mixing head and gun tip and maintain those temperatures within the tolerances specified. The guns shall have the capacity to deliver materials from approximately 1.5 to 3 gal/min (5.7 to 11.4 L/min) to compensate for a typical range of application speeds of 6 to 8 mph (10 to 13 km/h). The accessories such as spray tip, mix chamber, and rod diameter shall be selected according to the manufacturer's specifications to achieve proper mixing and an acceptable spray pattern. The application equipment shall be maneuverable to the extent that straight lines can be followed and normal curves can be made in a true arc. This equipment shall also have as an integral part of the gun carriage, a high pressure air spray capable of cleaning the pavement immediately prior to making application.

The equipment shall be capable of spraying both yellow and white polyurea, according to the manufacturer's recommended proportions and be mounted on a truck of sufficient size and stability with an adequate power source to produce lines of uniform dimensions and prevent application failure. The truck shall have at least two polyurea tanks each of 110 gal (415 L) minimum capacity and be equipped with hydraulic systems and agitators. It shall be capable of placing stripes on the left and right sides and placing two lines on a three-line system simultaneously with either line in a solid or intermittent pattern, in yellow or white, and applying the appropriate reflective media according to manufacturer's recommendations. All guns shall be in full view of operations at all times. The equipment shall have a metering device to register the accumulated installed quantities for each gun, each day. Each vehicle shall include at least one operator who shall be a technical expert in equipment operations and polyurea application techniques. Certification of equipment shall be provided at the pre-construction conference.

The mobile applicator shall include the following features:

- (a) Material Reservoirs. The applicator shall provide individual material reservoirs, or space for the storage of Part A and Part B of the resin composition.
- (b) Heating Equipment. The applicator shall be equipped with heating equipment of sufficient capacity to maintain the individual resin components at the manufacturer's recommended temperature of  $\pm 5$  °F ( $\pm 2.8$  °C) for spray application.
- (c) Dispensing Equipment. The applicator shall be equipped with glass bead and/or reflective element dispensing equipment. The applicator shall be capable of applying the glass beads and/or reflective elements at a rate and combination indicated by the manufacturer.
- (d) Volumetric Usage. The applicator shall be equipped with metering devices or pressure gauges on the proportioning pumps as well as stroke counters to monitor volumetric usage. Metering devices or pressure gauges and stroke counters shall be visible to the Engineer.
- (e) Pavement Marking Placement. The applicator shall be equipped with all the necessary spray equipment, mixers, compressors and other appurtenances to allow for the placement of reflectorized pavement markings in a simultaneous sequence of operations.

The Contractor shall provide an accurate temperature-measuring device(s) that shall be capable of measuring the pavement temperature prior to application of the material, the material temperature at the gun tip and the material temperature prior to mixing.

### CONSTRUCTION REQUIREMENTS

General. The pavement shall be cleaned by a method approved by the Engineer to remove all dirt, grease, glaze, or any other material that would reduce the adhesion of the markings with minimum or no damage to the pavement surface. New portland cement concrete pavements shall be air-blast-cleaned to remove all latents.

Widths, lengths, and shapes of the cleaned surface shall be of sufficient size to include the full area of the specified pavement marking to be placed.

The cleaning operation shall be a continuous moving operation process with minimum interruption to traffic.

Markings shall be applied to the cleaned surfaces on the same calendar day. If this cannot be accomplished, the surface shall be re-cleaned prior to applying the markings. No markings shall be applied until the Engineer approves the cleaning.

The pavement markings shall be applied to the cleaned road surface, during conditions of dry weather and subsequently dry pavement surfaces at a minimum uniform wet thickness of 15 mils (0.4 mm) according to the manufacturer's installation instructions. On new hot-mix asphalt (HMA) surfaces the pavement markings shall be applied at a minimum uniform wet thickness of 20 mils (0.5 mm). The application of and combination of reflective media (glass beads and/or reflective elements) shall be applied at a rate specified by the manufacturer. At the time of installation the pavement surface temperature and the ambient temperature shall be above 40 °F (4 °C) and rising. The pavement markings shall not be applied if the pavement shows any visible signs of moisture or it is anticipated that damage causing moisture, such as rain showers, may occur during the installation and set periods. The Engineer will determine the atmospheric conditions and pavement surface conditions that produce satisfactory results.

Using the application equipment, the pavement markings shall be applied in the following manner, as a simultaneous operation:

- (a) The surface shall be air-blasted to remove any dirt and residue.
- (b) The resin shall be mixed and heated according to manufacturer's recommendations and sprayed onto the pavement surface.

The edge of the center line or lane line shall be offset a minimum distance of 2 in. (50 mm) from a longitudinal crack or joint. Edge lines shall be approximately 2 in. (50 mm) from the edge of pavement. The finished center and lane lines shall be straight, with the lateral deviation of any 10 ft (3 m) line not to exceed 1 in. (25 mm).

Notification. The Contractor shall notify the Engineer 72 hours prior to the placement of the markings in order that he/she can be present during the operation. At the time of notification, the Contractor shall provide the Engineer the manufacturer and lot numbers of polyurea and reflective media that will be used.

Inspection. The polyurea pavement markings will be inspected following installation according to Article 780.10 of the Standard Specifications, except, no later than December 15, and inspected following a winter performance period that extends 180 days from December 15.

Method of Measurement. This work will be measured for payment in place, in feet (meters). Double yellow lines will be measured as two separate lines.

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for POLYUREA PAVEMENT MARKING TYPE I – LINE of the line width specified or for POLYUREA PAVEMENT MARKING TYPE II – LINE of the line width specified.

## **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 Angle (deg.)	Entrance Angle (deg.)	White	Orange	Fluorescent Orange
0.2	-4	365	160	150
0.2	+30	175	80	70
0.5	-4	245	100	95
0.5	+30	100	50	40”

Revise the first sentence of the first paragraph of Article 1106.02(c) of the Standard Specifications to read:

“Barricades and vertical panels shall have alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass.”

Revise the third sentence of the first paragraph of Article 1106.02(d) of the Standard Specifications to read:

“The bottom panels shall be 8 x 24 in. (200 x 600 mm) with alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass.”



## **REINFORCEMENT BARS (BDE)**

Effective: November 1, 2005

Revised: January 2, 2008

Revise Article 1006.10(a) of the Standard Specifications to read:

“ (a) Reinforcement Bars. Reinforcement bars will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, “Reinforcement Bar and/or Dowel Bar Plant Certification Procedure”. The Department will maintain an approved list of producers.

(1) Reinforcement Bars (Non-Coated). Reinforcement bars shall be according to ASTM A 706 (A 706M), Grade 60 (420) for deformed bars and the following.

- a. For straight bars furnished in cut lengths and with a well-defined yield point, the yield point shall be determined as the elastic peak load, identified by a halt or arrest of the load indicator before plastic flow is sustained by the bar and dividing it by the nominal cross-sectional area of the bar.
- b. For bars without a well-defined yield point, including bars straightened from coils, the yield strength shall be determined by taking the corresponding load at 0.005 strain as measured by an extensometer (0.5% elongation under load) and dividing it by the nominal cross-sectional area of the bar.
- c. For bars straightened from coils or bars bent from fabrication, there shall be no upper limit on yield strength; and for bar designation Nos. 3 - 6 (10 - 19), the elongation after rupture shall be at least 9%.
- d. Heat Numbers. Bundles or bars at the construction site shall be marked or tagged with heat identification numbers of the bar producer.
- e. Guided Bend Test. Bars may be subject to a guided bend test across two pins which are free to rotate, where the bending force shall be centrally applied with a fixed or rotating pin of a certain diameter as specified in Table 3 of ASTM A 706 (A 706M). The dimensions and clearances of this guided bend test shall be according to ASTM E 190.
- f. Spiral Reinforcement. Spiral reinforcement shall be deformed or plain bars conforming to the above requirements or cold-drawn steel wire conforming to AASHTO M 32.

(2) Epoxy Coated Reinforcement Bars. Epoxy coated reinforcement bars shall be according to Article 1006.10(a)(1) and shall be epoxy coated according to AASHTO M 284 (M 284M) and the following.

- a. Certification. The epoxy coating applicator shall be certified according to the current Bureau of Materials and Physical Research Policy Memorandum, “Epoxy Coating Plant Certification Procedure”. The Department will maintain an approved list.

- b. Coating Thickness. The thickness of the epoxy coating shall be 7 to 12 mils (0.18 to 0.30 mm). When spiral reinforcement is coated after fabrication, the thickness of the epoxy coating shall be 7 to 20 mils (0.18 to 0.50 mm).
- c. Cutting Reinforcement. Reinforcement bars may be sheared or sawn to length after coating, providing the end damage to the coating does not extend more than 0.5 in. (13 mm) back and the cut is patched before any visible rusting appears. Flame cutting will not be permitted.”

**SEEDING (BDE)**

Effective: July 1, 2004

Revised: August 1, 2007

Revise the following seeding mixtures shown in Table 1 of Article 250.07 of the Standard Specifications to read:

"Table 1 - SEEDING MIXTURES		
Class – Type	Seeds	lb/acre (kg/hectare)
2     Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	100 (110)
	Perennial Ryegrass	50 (55)
	Creeping Red Fescue	40 (50)
	Red Top	10 (10)
2A    Salt Tolerant Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	60 (70)
	Perennial Ryegrass	20 (20)
	Red Fescue (Audubon, Sea Link, or Epic)	30 (20)
	Hard Fescue (Rescue 911, Spartan II, or Reliant IV)	30 (20)
	Fults Salt Grass 1/	60 (70)"

Revise Table II of Article 1081.04(c)(6) of the Standard Specifications to read:

TABLE II						
Variety of Seeds	Hard Seed	Purity	Pure Live	Weed	Secondary *	Notes
	% Max.	% Min.	Seed % Min.	% Max.	Noxious Weeds No. per oz (kg) Max. Permitted	
Alfalfa	20	92	89	0.50	6 (211)	1/
Clover, Alsike	15	92	87	0.30	6 (211)	2/
Red Fescue, Audubon	0	97	82	0.10	3 (105)	-
Red Fescue, Creeping	-	97	82	1.00	6 (211)	-
Red Fescue, Epic	-	98	83	0.05	1 (35)	-
Red Fescue, Sea Link	-	98	83	0.10	3 (105)	-
Tall Fescue, Blade Runner	-	98	83	0.10	2 (70)	-
Tall Fescue, Falcon IV	-	98	83	0.05	1 (35)	-
Tall Fescue, Inferno	0	98	83	0.10	2 (70)	-
Tall Fescue, Tarheel II	-	97	82	1.00	6 (211)	-
Tall Fescue, Quest	0	98	83	0.10	2 (70)	-
Fults Salt Grass	0	98	85	0.10	2 (70)	-
Kentucky Bluegrass	-	97	80	0.30	7 (247)	4/
Oats	-	92	88	0.50	2 (70)	3/
Redtop	-	90	78	1.80	5 (175)	3/
Ryegrass, Perennial, Annual	-	97	85	0.30	5 (175)	3/
Rye, Grain, Winter	-	92	83	0.50	2 (70)	3/
Hard Fescue, Reliant IV	-	98	83	0.05	1 (35)	-
Hard Fescue, Rescue 911	0	97	82	0.10	3 (105)	-
Hard Fescue, Spartan II	-	98	83	0.10	3 (105)	-
Timothy	-	92	84	0.50	5 (175)	3/
Wheat, hard Red Winter	-	92	89	0.50	2 (70)	3/”

Revise the first sentence of the first paragraph of Article 1081.04(c)(7) of the Standard Specifications to read:

“The seed quantities indicated per acre (hectare) for Prairie Grass Seed in Classes 3, 3A, 4, 4A, 6, and 6A in Article 250.07 shall be the amounts of pure, live seed per acre (hectare) for each species listed.”

**SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)**

Effective: November 1, 2005

Revised: January 1, 2007

Definition. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

Usage. 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  $\pm 2$  in. ( $\pm 50$  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.

Test Methods. Illinois Test Procedures SCC-1, SCC-2, SCC-3, SCC-4, SCC-5, SCC-6, and Illinois Modified AASHTO T 22, 23, 121, 126, 141, 152, 177, 196, and 309 shall be used for testing of self-consolidating concrete mixtures.

Mix Design Submittal. The Contractor's Level III PCC Technician shall submit a mix design according to the "Portland Cement Concrete Level III Technician" course manual, except target slump information is not applicable and will not be required. However, a slump flow target range shall be submitted. In addition, the design mortar factor may exceed 1.10 and durability test data will be waived.

A J-ring value shall be submitted if a lower mix design maximum will apply. An L-box blocking ratio shall be submitted if a higher mix design minimum will apply. The Contractor shall also indicate applicable construction items for the mix design.

Trial mixture information will be required by the Engineer. A trial mixture is a batch of concrete tested by the Contractor to verify the Contractor's mix design will meet specification requirements. Trial mixture information shall include test results as specified in the "Portland Cement Concrete Level III Technician" course manual. Test results shall also include slump

flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index. For the trial mixture, the slump flow shall be near the midpoint of the proposed slump flow target range.

Trial Batch. A minimum 2 cu yd (1.5 cu m) trial batch shall be produced, and the self-consolidating concrete admixture dosage proposed by the Contractor shall be used. The slump flow shall be within 1.0 in. (25 mm) of the maximum slump flow range specified by the Contractor, and the air content shall be within the top half of the allowable specification range.

The trial batch shall be scheduled a minimum of 21 calendar days prior to anticipated use and shall be performed in the presence of the Engineer.

The Contractor shall provide the labor, equipment, and materials to test the concrete. The mixture will be evaluated by the Engineer for strength, air content, slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index.

Upon review of the test data from the trial batch, the Engineer will verify or deny the use of the mix design and notify the Contractor. Verification by the Engineer will include the Contractor's target slump flow range. If applicable, the Engineer will verify the Contractor's maximum J-ring value and minimum L-box blocking ratio.

A new trial batch will be required whenever there is a change in the source of any component material, proportions beyond normal field adjustments, dosage of the self-consolidating concrete admixture, batch sequence, mixing speed, mixing time, or as determined by the Engineer. The testing criteria for the new trial batch will be determined by the Engineer.

When necessary, the trial batches shall be disposed of according to Article 202.03 of the Standard Specifications.

Mixing Portland Cement Concrete. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

Falsework and Forms. 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.

Placing and Consolidating. Concrete placement and consolidation shall be according to Article 503.07 of the Standard Specifications, except as follows:

Revise the third paragraph of Article 503.07 of the Standard Specifications to read:

“Open troughs and chutes shall extend as nearly as practicable to the point of deposit. The drop distance of concrete shall not exceed 5 ft (1.5 m). If necessary, a tremie shall be used to meet this requirement. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer. For drilled shafts, free fall placement will not be permitted.”

Delete the seventh, eighth, ninth, and tenth paragraphs of Article 503.07 of the Standard Specifications.

Add to the end of the eleventh paragraph of Article 503.07 of the Standard Specifications the following:

“Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer.”

Quality Control by Contractor at Plant. The specified test frequencies for aggregate gradation, aggregate moisture, air content, unit weight/yield, and temperature shall be performed as indicated in the contract plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed as needed to control production. The column segregation index test and hardened visual stability index test will not be required to be performed at the plant.

Quality Control by Contractor at Jobsite. The specified test frequencies for air content, strength, and temperature shall be performed as indicated in the contract plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed on the first two truck deliveries of the day, and every 50 cu yd (40 cu m) thereafter. The Contractor shall select either the J-ring or L-box test for jobsite testing.

The column segregation index test will not be required to be performed at the jobsite. The hardened visual stability index test shall be performed on the first truck delivery of the day, and every 300 cu yd (230 cu m) thereafter. Slump flow, visual stability index, J-ring value or L-box blocking ratio, air content, and concrete temperature shall be recorded for each hardened visual stability index test.

The Contractor shall retain all hardened visual stability index cut cylinder specimens until the Engineer notifies the Contractor that the specimens may be discarded.

If mix foaming or other potential detrimental material is observed during placement or at the completion of the pour, the material shall be removed while the concrete is still plastic.

Quality Assurance by Engineer at Plant. For air content and aggregate gradation, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract plans.

For slump flow, visual stability index, and J-ring or L-box tests, quality assurance independent sample testing and split sample testing will be performed as determined by the Engineer.

Quality Assurance by Engineer at Jobsite. For air content and strength, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract plans.

For slump flow, visual stability index, J-ring or L-box, and hardened visual stability index tests, quality assurance independent sample testing will be performed as determined by the Engineer.

For slump flow and visual stability index quality assurance split sample testing, the Engineer will perform tests at the beginning of the project on the first three tests performed by the Contractor. Thereafter, a minimum of ten percent of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design. The acceptable limit of precision will be 1.5 in. (40 mm) for slump flow and a limit of precision will not apply to the visual stability index.

For the J-ring or the L-box quality assurance split sample testing, a minimum of 80 percent of the total tests required of the Contractor will be witnessed by the Engineer per plant, which will include a minimum of one witnessed test per mix design. The Engineer reserves the right to conduct quality assurance split sample testing. The acceptable limit of precision will be 1.5 in. (40 mm) for the J-ring value and ten percent for the L-box blocking ratio.

For each hardened visual stability index test performed by the Contractor, the cut cylinders shall be presented to the Engineer for determination of the rating. The Engineer reserves the right to conduct quality assurance split sample testing. A limit of precision will not apply to the hardened visual stability index.

#### **SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)**

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

#### **TEMPORARY EROSION CONTROL (BDE)**

Effective: November 1, 2002

Revised: January 1, 2008

Revise the third paragraph of Article 280.03 of the Standard Specifications to read:

“Erosion control systems shall be installed prior to beginning any activities which will potentially create erodible conditions. Erosion control systems for areas outside the limits of construction such as storage sites, plant sites, waste sites, haul roads, and Contractor furnished borrow sites shall be installed prior to beginning soil disturbing activities at each area. These offsite systems shall be designed by the Contractor and be subject to the approval of the Engineer.”

Add the following paragraph after the third paragraph of Article 280.03 of the Standard Specifications:

“The temporary erosion and sediment control systems shown on the plans represent the minimum systems anticipated for the project. Conditions created by the Contractor’s operations, or for the Contractor’s convenience, which are not covered by the plans, shall be protected as directed by the Engineer at no additional cost to the Department. Revisions or modifications of the erosion and sediment control systems shall have the Engineer’s written approval.”

Add the following paragraph after the ninth paragraph of Article 280.07 of the Standard Specifications:

“Temporary or permanent erosion control systems required for areas outside the limits of construction will not be measured for payment.”

Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications.

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

Effective: August 1, 2007

Description. 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.

Aggregate Expansion Values. 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 ( $\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$ ) 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.

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

Mixture Options. 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:

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

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 ( $\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$ ) 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 ( $\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$ ) 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  $\leq 0.16$  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 ( $\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$ ), a new ASTM C 1567 test will not be required.

Testing. 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 ( $\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$ ) 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 alkali-

reactive 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.

### **TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)**

Effective: 3/8/96

Revised: 02/9/05

This work shall include furnishing, installing, maintaining, replacing, relocating, and removing all traffic control devices used for the purpose of regulating, warning, or directing traffic. Traffic control and protection shall be provided as called for in the plans, applicable Highway Standards, District One Expressway details, Standards and Supplemental Specifications, these Special Provisions, or as directed by the Engineer.

### GENERAL

The governing factor in the execution and staging of work for this project is to provide the motoring public with the safest possible travel conditions on the expressway through the construction zone. The Contractor shall arrange his operations to keep the closing of lanes and/or ramps to a minimum.

The Contractor shall be responsible for the proper location, installation, and arrangement of all traffic control devices. Special attention shall be given to existing warning signs and overhead guide signs during all construction operations. Warning signs and existing guide signs with down arrows shall be kept consistent with the barricade placement at all times. The Contractor shall immediately remove, completely cover, or turn from the motorist's view all signs which are inconsistent with lane assignment patterns.

The Contractor shall coordinate all traffic control work on this project with adjoining or overlapping projects, including barricade placement necessary to provide a uniform traffic detour pattern. When directed by the Engineer, the Contractor shall remove all traffic control devices that were furnished, installed, or maintained by him under this contract, and such devices shall remain the property of the Contractor. All traffic control devices shall remain in place until specific authorization for relocation or removal is received from the Engineer.

### Signs

Prior to the beginning of construction operations, the Contractor will be provided a sign log of all existing signs within the limits of the construction zone. The Contractor is responsible for verifying the accuracy of the sign log. Throughout the duration of this project, all existing traffic

signs shall be maintained by the Contractor. All provisions of Article 107.25 of the Standard Specifications shall apply except the third paragraph shall be revised to read: "The Contractor shall maintain, furnish, and replace at his own expense, any traffic sign or post which has been damaged or lost by the Contractor or a third party. The Contractor will not be held liable for third party damage to large freeway guide signs".

#### Exit Gore Signs

The exit gore signs as shown in Standard 701411 shall be a minimum size of 1.2m (48 inch) by 1.2m (48 inch) with 300mm (12 inch) capital letters and a 500mm (20inch) arrow.

#### Rough Grooved Surface Signs

The Contractor shall furnish and erect "Rough Grooved Surface" signs (W8-1107) on both sides of the expressway, 300m (1000') in advance of any milled area. These signs shall be erected on all ramps that enter the milled area. All signs shall be mounted at a minimum clearance height of 2.1m (7').

#### Drums/Barricades

Check barricades shall be placed in work areas perpendicular to traffic every 300m (1000'), one per lane and per shoulder, to prevent motorists from using work areas as a traveled way. Check barricades shall also be placed in advance of each open patch, or excavation, or any other hazard in the work area, the first at the edge of the open traffic lane and the second centered in the closed lane. Check barricades, either Type I or II, or drums shall be equipped with the flashing light.

To provide sufficient lane widths (3m [10'] minimum) for traffic and also working room, the Contractor shall furnish and install vertical barricades with steady burn lights, in lieu of Type II or drums, along the cold milling and asphalt paving operations. The vertical barricades shall be placed at the same spacing as the drums.

#### Vertical Barricades

Vertical barricades shall not be used in lane closure tapers, lane shifts, and exit ramp gores. Also, vertical barricades shall not be used as patch barricades or check barricades. Special attention shall be given, and ballast provided per manufacture's specification, to maintain the vertical barricades in an upright position and in proper alignment.

#### Temporary Concrete Barrier Wall

Prismatic barrier wall reflectors shall be installed on both the face of the wall next to traffic and the top of all temporary concrete barrier wall. These reflectors shall be placed at 50 foot centers along tangents and at 25 foot centers on curves. The color of these reflectors shall match the color of the edgelines (yellow on the left and crystal or white on the right). If the base of the temporary concrete barrier wall is 12 inches or less from the travel lane, then the wall shall also have a 6 inch wide temporary pavement marking edgeline (yellow on the left and white on the right).

Method of Measurement: This item of work will be measured on a lump sum basis for furnishing, installing, maintaining, replacing, relocating, and removing traffic control devices required in the plans and these Special Provisions. Traffic control and protection required under Standards 701101, 701400, 701401, 701411 701426 and 701446 will be included with this item.

Basis of Payment:

- a) This work will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS). This price shall be payment in full for all labor, materials, transportation, handling, and incidental work necessary to furnish, install, maintain, replace, relocate, and remove all Expressway traffic control devices required in the plans and specifications.

In the event the sum total value of all the work items for which traffic control and protection is required is increased or decreased by more than ten percent (10%), the contract bid price for Traffic Control and Protection will be adjusted as follows:

$$\text{Adjusted contract price} = .25P + .75P [1+(X-0.1)]$$

Where "P" is the bid unit price for Traffic Control and Protection:

$$\text{Where "X"} = \frac{\text{Difference between original and final sum total value of all work items for which traffic control and protection is required.}}{\text{Original sum total value of all work items for which traffic control and protection is required.}}$$

The value of the work items used in calculating the increase and decrease will include only items that have been added to or deducted from the contract under Article 104.02 of the Standard Specifications and only items which require use of Traffic Control and Protection.

- b) The Engineer may require additional traffic control be installed in accordance with standards and/or designs other than those included in the plans. In such cases, the standards and/or designs will be made available to the Contractor at least one week in advance of the change in traffic control. Payment for any additional traffic control required will be in accordance with Article 109.04 of the Standard Specifications.
- c) Revisions in the phasing of construction or maintenance operations, requested by the Contractor, may require traffic control to be installed in accordance with standards and/or designs other than those included in the plans. Revisions or modifications to the traffic control shown in the contract shall be submitted by the Contractor for approval by the Engineer. No additional payment will be made for a Contractor requested modification.
- d) Temporary concrete barrier wall will be measured and paid for according to Section 704.

Impact attenuators, temporary bridge rail, and temporary rumble strips will be paid for separately.

All temporary pavement markings will be measured and paid for according to Section 703 and Section 780.

All pavement marking removal will be measured and paid for according to Section 703 or Section 783.

Temporary pavement marking at the base of the temporary concrete barrier wall will be measured and paid for as TEMPORARY PAVEMENT MARKING, 6".

All prismatic barrier wall reflectors will be measured and paid for according to Section 782.

### **WATER VALVE, 2 1/2 INCH**

Description: Work associated with this item shall include excavation, the furnishing and installation of water valves and water valve service boxes, installation 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 the associated water service line 2 1/2" and irrigation system connections. Curb stops shall be of the round-way type conforming to AWWA Standard C800-89 Underground Service Line Valves and Fittings.

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.

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 lid. Curb stop and box shall be equipped with a shut-off rod, typically 2 inches shorter than the curb box at its maximum extension.

Capped stubouts to be placed per the plans, at locations to be irrigated in the future, will not be paid for separately but shall be in the cost of the applicable WATER VALVE, 2 1/2 INCH.

Method of Measurement: WATER VALVE, 2 1/2 INCH will be measured on a per each basis.

Basis of Payment: WATER VALVE, 2 1/2 INCH will be paid for per each, which price shall include all labor, material, and equipment required to complete the work as specified.

**STORM WATER POLLUTION PREVENTION PLAN**



**STORM WATER POLLUTION PREVENTION PLAN**

Route	<u>I-90/94 Dan Ryan Expressway</u>	Marked	<u>Dan Ryan Expressway I-57 at Illinois Route 1 (Halsted St) &amp; I-90 at MLK to 15 th Street</u>
Section	<u>See individual contract</u>	Project No.	<u>Various Contract Numbers -- Refer to Attachment</u>
County	<u>Cook</u>		

This plan has been prepared to comply with the provisions of the MSY-Phase II NPDES Permit Number ILR40, issued by the Illinois Environmental Protection Agency for storm water discharges.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

John P. Kane  
 Signature  
District Engineer  
 Title

August 5, 2003  
 Date

**1. Site Description**

- a. The following is a description of the construction activity which is the subject of this plan:

The project is located at Interstate 94 (the Dan Ryan Expressway) from the I-57 interchange to Illinois 1 (Halsted Street) to the west and Martin Luther King (MLK) Drive to the east, and continues in a northerly direction to 15th Street.

**Construction Descriptions**

The Dan Ryan Expressway project consists of roadway improvements including added lanes, mainline and shoulder reconstruction, construction of retaining walls, new collector-distributor roadways, new and relocated exit and entrance ramps, lighting, drainage, signing, and surveillance improvements.

The Dan Ryan Expressway reconstruction project was designed in three segments in Phase I. The three segments are described from south to north.

The segment from 95th to 67th Streets (U.S. Route 20 / 45), the improvement includes reconstruction of the eight traffic lanes of the existing Dan Ryan Expressway pavement, the addition of a through travel lane in each direction, and modifications to entrance and exit ramps. The improvement involves the addition of a through travel lane along both northbound and southbound Dan Ryan onto Interstate 57 to the interchange with Halsted Street (Illinois Route 1). There are intersection improvements at 79th Street.

The segment from 67th to 47th Street includes reconstruction of the existing northbound and southbound express lanes (four lanes in each direction) and local lanes (two lanes in each direction). The improvement will also provide for an additional through travel lane in each direction to the local traffic lanes, and modifications to all entrance and exit ramps. There are intersection improvements at 67th Street. Frontage roads will be reconstructed both northbound and southbound from 63rd to 47th Streets. Additional work will involve bridge construction and reconfiguration of the Chicago Skyway / Dan Ryan Expressway interchange to provide an additional entrance ramp from the Chicago Skyway to connect directly to the northbound Dan Ryan Expressway express lanes.

The scope of the roadway work between 47th and 31st Streets will include reconstruction of the existing northbound and southbound express lanes (four lanes in each direction) and local lanes (three lanes in each direction) to the Dan Ryan Expressway pavement, and the reconstruction and/or reconfiguration of entrance and exit ramps. The Root Street structure (41st Street) will be removed.

The segment from 31<sup>st</sup> Street to 15<sup>th</sup> Street includes the rehabilitation of the viaduct portion of the Dan Ryan expressway. This work involves scarifying and overlaying the entire existing bridge deck with a new concrete overlay along with the removal and replacement of expansion joints and bearing pads and various other repairs.

The drainage work consists of removing or abandoning the existing collector storm sewer system and surface water collection system and constructing a new collector storm sewer and surface water collection system. The existing main drain will remain in place and remain functional, with new connections for the proposed storm sewer system. New collector sewers to drain the area directly tributary to the Dan Ryan Expressway (CTA tracks, local lanes, and adjacent ramps and grass areas), and overflows from offsite tributary areas (frontage roads) are planned. Separate collector sewers are required to drain the northbound and southbound lanes of the Dan Ryan Expressway. These proposed collector sewers are to be designed to convey the 50-year storm event.

The work will include the construction of new retaining walls and the rehabilitation, and/or modifications of several existing retaining walls and any roadway and traffic signal improvements required at cross streets and alternate routes.

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In addition, other improvements include:

- A new highway lighting system (110 foot towers with lights on 11-foot mounting rings).
  - New expressway signing (provides four new and upgrade three changeable message signs).
  - Replacement of traffic surveillance equipment with upgraded technology.
  - Closed circuit television for traffic conditions and crash incident monitoring.
  - Accident investigation sites.
-



- Other incidental work as required completing the reconstruction of this segment of the expressway to AASHTO and IDOT criteria.

The improvement will also consolidate several points of access and improve the unsafe weaving conditions created by the existing substandard weaving distances. Currently, ramps are spaced evenly at one-half mile increments, resulting in weaving distances in the range of 300 feet. This is a major safety concern and suspected cause for the high incidence of sideswipe collisions in the ramp influence areas. The proposed access consolidation plan improves many of the mainline weaving movements while minimally influencing the local access to the Dan Ryan Expressway through the addition of collector-distributor roadways and both entrance and exit ramp removals. The presence of parallel city street frontage roads facilitates local access without substantive changes in through and local travel patterns. The proposals for ramp closure are:

- Northbound (NB) exit and southbound (SB) entrance at 76th Street (2 ramps)
- Northbound (NB) and southbound (SB) exits and entrances at 59th Street (4 ramps)
- Northbound (NB) and southbound (SB) exits and entrances at 51st Street (4 ramps)
- Northbound (NB) exit and southbound (SB) entrance at 43rd Street (2 ramps)

Capacity analyses indicate unsatisfactory conditions at the intersections of 55th Street (Garfield Boulevard) / Wells Street and 55th Street (Garfield Boulevard) / Wentworth Avenue. The improvements necessary to make this interchange operate effectively require right-of-way acquisition from three separate parcels. The parcels on the southwest quadrant of 55th Street (Garfield Boulevard) / Wells Street is occupied by a "Mobil Service Station" in which a portion of each of the two parcels must be acquired to construct an eastbound to southbound right turn lane. In addition, dual right turn lanes are proposed for the northbound to eastbound movement at the intersection of 55th Street (Garfield Boulevard) / Wentworth Avenue. These right turn lanes require securing property, the portion of the parcel that is currently vacant.

To construct the proposed two-lane, left-hand exit to the Chicago Skyway from the southbound lanes on the Dan Ryan Expressway, Wells Street needs to be relocated from 64th Street to 65th Street. The improvement requires reconstruction of an 18 foot high retaining wall adjacent to the mainline and the full replacement of the frontage road (Wells Street) pavement. The realignment shifts the centerline of the road approximately 10 feet west. A relocation and reconstruction of the west sidewalk bordering Wells Street does encroach into a parcel currently owned by the Chicago Housing Authority for the "Yale Street Apartment". The corner parcel would facilitate the relocation and reconstruction of the 5 foot sidewalk and modifications to the bituminous parking lot.

The right-of-way uses are summarized in the tabulation below:

Right-of-Way Acquisition	Acres	Number of Parcels
SW Corner of 55 <sup>th</sup> / Wells Street	0.05	6
SE Corner of 55 <sup>th</sup> / Wentworth Avenue	0.10	1
NE Corner of 57 <sup>th</sup> / Wentworth Avenue	0.12	2
SE Corner of 57 <sup>th</sup> / Wentworth Avenue	0.24	1
NE Corner of 59 <sup>th</sup> / Wentworth Avenue	0.007	1

Right-of-Way Acquisition	Acres	Number of Parcels
SE Corner of 59 <sup>th</sup> / Wentworth Avenue	0.014	1
NW Corner of 63 <sup>rd</sup> / Wells Street	0.05	1
Along West edge of Wells Street From 65 <sup>th</sup> Street to 64 <sup>th</sup> Street	0.11	1
Temporary Construction Easement	Acres	Number of Parcels
Along west edge of Wells Street From 65 <sup>th</sup> Street to 64 <sup>th</sup> Street	0.07	1

The Total Acquired Right-of-Way (ROW) is 0.691 acres involving eight parcels, with a Temporary Construction Easement (TCE) of 0.07 acres involving one parcel.

Environmental Descriptions

Special waste for the Dan Ryan project has HIGH risk for the occurrence of regulated substances or natural hazards at twelve sites. A Preliminary Environmental Site Assessment (PESA #1106) with stipulations for excavation depths varies for twelve high risk locations. Depth stipulations can be met at Sites: 808-10A, 1106-17B, 1106-25B, 1106-44A, and 1106-51. A request for Preliminary Site Investigation (PSI) will be required for Sites: 1106-2B, 1106-4A, 1106-6A, and 1106-9, 1106-33B, 1106-47, and 1106-52.

Besides special waste, there are no ecologically sensitive areas in the Dan Ryan project area. The Environmental Survey Request Form (ESRF) on 10/15/99 requested only biological and special waste survey because all of the ground had been previously disturbed and no new right-of-way is to be involved with areas not previously occupied, excavated, or disturbed. The project, as described on the ESRF, does not require biological or wetland surveys. The Illinois Department of Natural Resources (IDNR) Natural Heritage Database has no records of listed species, natural areas or nature preserves within the Dan Ryan project corridor (IDNR Agency Action Report dated September 20, 1999). By agreement, no coordination with the Illinois Department of Natural Resources (IDNR) and the U.S. Fish and Wildlife Service (USFWS) are necessary.

The northern portion of the project, in the vicinity of 26<sup>th</sup> Street, spans the South Branch of the Chicago River. The closed drainage system of the Dan Ryan viaduct from 28<sup>th</sup> Street to 15<sup>th</sup> Street will be maintained in its entirety. There are no other water resources in the area involved with the project. A closed drainage system for storm water and urban roadway cross section, including pavement and shoulder, will continue.

The project will result in the disturbance of 0.4 or more hectares (1.0 acre). Permit coverage for the project is secured either under the IEPA Phase II General Permit for Storm-water-Discharges (NPDES Permit No. ILR40) or under an individual NPDES permit. Requirements applicable for a permit will be followed, including the preparation of a Storm-water Pollution Prevention Plan. The plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the construction site. The plan shall describe and ensure the implementation of practices that will reduce the pollutants in discharges associated with construction site activity and assure compliance with terms of the permits.

Although there may be a remote possibility (not likely) of a potable water well within 200 feet (60 meters) of the centerline, this threshold is only relevant for routes and

sources of groundwater pollution. Since this project will not introduce any new routes of groundwater pollution (dry wells, "French drains", or borrow pits) or sources (bulk road oil or deicing storage facilities), then there will be no violation of the wellhead setback requirements.

According to the National Flood Insurance Rate Maps (FIRM), there are no flood plains involved within this project limits.

From field inspection by project team environmental and wetland specialists, and their review of the available and published National Wetlands Inventory (NWI) maps, and the most recent available aerial photography of the area, determined wetlands are not involved. The project is within the existing rights-of-way, and no wetlands are located within or adjacent to the required parcels, which include: west edge of Wells Street from 65th to 64th Street; 63rd Street and South Wells Street, 59th Street and Wentworth Avenue; 57th Street and Wentworth Avenue; 55th Street and South Wentworth Avenue, and 55th Street and South Wells Street.

There is no use or proposed use of protected Section 4(f), Section 6f lands, or lands that have OSLAD funds involved with their purchase and/or development.

- b. The following is a description of the intended sequence of major activities for the reconstruction of the Dan Ryan Expressway. The construction year, contract number, description, duration of construction, and highlights of work to be completed follow.

**Contract # – Name/Description**

Contract Duration

- Major Activities

**Construction Year 2003**

**62573** – Shoulder Repair and Median Cross-Over

August 18 – October 31, 2003

- Reconstruction of the 65th to 47th Street local lane inside shoulder

**62591** – Storm Sewer Jacking

November 15, 2003 – June 4, 2004

- Storm sewer jacking from 95th to 67th Streets

**Construction Year 2004 to 2005**

**62594** – 83rd to 79th Street C-D System and Ramps

March 1 – October 31, 2004

- Reconstruction and reconfiguration of the collector-distributor (C-D) ramps between 83rd and 79th Streets
- Replacement of the storm sewer
- Retaining wall construction

**62691** – Reconstruct Watermain Crossing under the Dan Ryan from 32nd Street to 63rd Street

May 3, 2004 – June 20, 2005

**62590** – 71st to 67th Street C-D System and Ramps and reconstruct 67<sup>th</sup> St. bridge  
June 21, 2004 – August 15, 2005

- Reconstruction of the collector-distributor (C-D) ramps between 71st and 67th Street

- Improvements to 67th Street / State Street intersection
- Retaining wall construction
- Reconstruction of the 67th Street bridge

**62587 – Wentworth Avenue Overpass and Wells Street Realignment**  
June 21, 2004 – June 30, 2005

- Reconstruction of Wells Street from 67th to 63rd Street
- Reconstruction of Wentworth Avenue bridge

**62589 – Skyway Interchange Bridges and Local Lanes Wentworth Avenue to 67th Street**

June 21, 2004 – August 15, 2005

- Dan Ryan / Skyway interchange
- Reconstruction of local lanes from 67th to 63rd Street
- Retaining wall construction

**62586 – 57th Street Bridge, Retaining Walls, Ramps and Frontage Roads 63rd to 47th Streets**

August 1, 2004 – October 31, 2005

- Reconstruction of the frontage roads, Wells Street and Wentworth Avenue, between 63rd and 47th Street
- Construction of eight (8) new ramps between 63rd and 47th Street
- Construction of the new 57th Street bridge over the Dan Ryan
- Retaining walls

**62693 – Retaining Walls, Ramps and Frontage Roads 59th to 63rd Streets**

August 1, 2004 – October 31, 2005

- Reconstruction of the frontage roads, Wells Street and Wentworth Avenue, between 59th and 63rd Streets
- Construction of new ramps between 63rd and 47th Street
- Retaining walls

**62585 – Reconstruct SB Ramps between 39th and 31st Street and Shoulder Reconstruction**

September 13, 2004 – November 30, 2005

- Reconstruction of the SB ramps between 39th and 31st Street

**62584 – Reconstruct NB Ramps between 39th and 31st Street and Shoulder Reconstruction**

September 13, 2004 – November 30, 2004

- Reconstruction of the NB ramps between 39th and 31st Street

**62692 – Reconstruct Watermain Crossings under the Dan Ryan from 75th Street to the I-57 Interchange**

September 27, 2004 – July 1, 2005

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**Construction Year 2005 - 2006**

**62694** – NB Retaining Walls and Ramps from 71st to I-57 and 71st to 75th Street C-D System  
September 1, 2005 – July 31, 2006

**62695** – SB Retaining Walls and Ramps from 71st Street to I-57 and 71st to 75th Street C-D System  
September 1, 2005 – July 31, 2006

**Construction Year 2006 - 2007**

**62580** – NB Elevated Bridge Repair from 15<sup>th</sup> Street to 28<sup>th</sup> Street  
March 15 – October 21, 2006

- Rehabilitation of NB mainline lanes and ramps

**62304** – NB Mainline Lanes, 71st to I-57 and Reconstruction of the NB I-57 Bridge over the WB cross connection from I-94  
August 1, 2006 – November 30, 2007

- Reconstruction of the NB mainline for the Dan Ryan through the I-57 interchange
- Replacement of the storm sewer
- Retaining wall construction
- Reconstruction of the CTA wall

**62593** – SB Mainline Lanes, 71st to I-57  
August 1, 2006 – November 30, 2007

- Reconstruction of the SB mainline for the Dan Ryan through the I-57 interchange
- Replacement of the storm sewer
- Retaining wall construction
- Reconstruction of the CTA wall

**62302** – SB Express Lanes 71st to 31st Streets  
March 6 – October 31, 2006

- Reconstruction of the SB express lanes between 71<sup>st</sup> and 47<sup>th</sup> Street
- Replacement of the storm sewer
- Reconstruction of the CTA wall

**62300** – NB Express Lanes 71st to 31st Streets  
March 6 – October 31, 2006

- Reconstruction of the NB express lanes between 71<sup>st</sup> and 47<sup>th</sup> Street
- Replacement of the storm sewer
- Reconstruction of the CTA wall

**62303** – SB Local Lanes, 63<sup>rd</sup> to 31<sup>st</sup> Streets and Miscellaneous Ramps  
March 1 – October 31, 2007

- Reconstruction of the SB local lanes between 63<sup>rd</sup> and 31<sup>st</sup> Streets
- Replacement of the storm sewer

**62301** – NB Local Lanes, 63<sup>rd</sup> to 31<sup>st</sup> Streets and Miscellaneous Ramps  
March 7 – November 2007

- Reconstruction of the NB local lanes between 63<sup>rd</sup> and 31<sup>st</sup> Streets
- Construction of the WB Skyway to NB Dan Ryan ramp to the local lanes
- Replacement of the storm sewer

**62581** – SB Elevated Bridge Repair from 15<sup>th</sup> to 28<sup>th</sup> Streets

March 1 – October 31, 2007

- Rehabilitation of SB mainline lanes and ramps

- c. The total area of the construction site is estimated to be 612 acres.

The total area of the site that it is estimated will be disturbed by excavation, grading or other activities is acres 433.

- d. The estimated runoff coefficients of the various areas of the site after construction activities are completed are contained in the project drainage study, which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained in individual Soils Reports for each construction contract.
- e. The design/project report, hydraulic report, or plan documents, hereby incorporated by reference, contain site map(s) indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of major soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water.
- f. The names of receiving water(s) and areal extent of wetland acreage at the site are in the design/project report or plan documents, which are incorporated by reference as a part of this plan.

## 2. Controls

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b. above. For each measure discussed, the contractor that will be responsible for its implementation is indicated. Each such contractor has signed the required certification on forms which are attached to, and a part of, this plan:

### a. Erosion and Sediment Controls

- (i) Stabilization Practices. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided in 2.a.(i).(A) and 2.b., stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased on all disturbed portions of the site where construction activity will not occur for a period of 21 or more calendar days.

- (A) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

#### Description of Stabilization Practices:

1. Temporary Erosion Control Seeding shall be applied in accordance with the Special Provision. Seed mixture will depend on the time of year it is

applied. Oats will be applied from January 1 to July 31 and Hard Red Winter Wheat from August 1 to December 31.

2. Short Term Seeding - Seeding Class 2A shall be used to protect bare earth from more than just one or two summer-winter cycles. Due to the length and complexity of this project, it is necessary that short term, final graded slopes be short term seeded as directed by the Engineer.
  3. Stone Riprap - Class A4 stone riprap with filter fabric will be used as protection at the discharge end of most storm sewer and culvert end sections to prevent scouring at the end of pipes and to prevent downstream erosion.
  4. Temporary Tree Protection - Shall consist of items "temporary fencing" and "tree trunk protection" as directed by the engineer and in accordance with Article 201.05 of the Illinois Department of Transportation's Standard Specifications for Road and Bridge Construction.
  5. Permanent Stabilization - All areas disturbed by construction will be stabilized as soon as permitted with permanent seeding following the finished grading, but always within seven days with Temporary Erosion Control Seeding. Erosion Blankets will be installed over fill slopes, which have been brought to final grade and have been seeded to protect the slopes from rill and gully erosion and allow seeds to germinate properly.
  6. Erosion Control Blankets and Mulching - Erosion control blankets will be installed over fill slopes and in high velocity areas that have been brought to final grade and seeded to protect slopes from erosion and allow seeds to germinate. Mulch will be applied in relatively flat areas to prevent further erosion.
- (ii) Structural Practices. Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

Description of Structural Practices:

1. Sediment Control, Stabilized Construction Access - Coarse aggregate overlaying a geotextile fabric will be placed in locations necessary for contractor access. The aggregate surface of the access points will capture soil debris, reducing the amount of soil deposits placed on to the roadway by vehicles leaving the work zones.
2. Inlet Filters - Inlet and Pipe Protection will be provided for storm sewers. These filters will be placed in every inlet, catch basin or manhole with an open lid, which will drain water during at least a 10-year storm event. The Erosion-Control-Plan will identify the structures requiring Inlet filters.
3. Sediment Control, Silt Fence - A silt fence will be placed adjacent to the areas of construction to intercept waterborne silt and prevent it from leaving

the site. These areas are marked on the erosion control plans in each contract.

4. Sediment Control, Temporary Ditch Checks - Rolled excelsior ditch checks will be placed in swales at the rate of one for every 0.3 meters in vertical drop, or as directed by the Engineer, in order to prevent downstream erosion.
5. Sediment Control, Temporary Stream Crossing - Coarse aggregate overlaying a geotextile fabric will be placed in locations necessary for contractor access over water channels. The aggregate surface of the crossing will reduce the amount of soil disturbance in the streams.
6. Sediment Control, Temporary Pipe Slope Drain - This item consists of a pipe with flared end sections, placed daily, along with anchor devices in conjunction with temporary berms that direct runoff down an unstabilized slope.
7. Sediment Control, Dewatering Basins will be provided at wherever the contractor is removing and discharging water from excavated areas and the water is not being routed through a sediment trap or basin.
8. Stone riprap will be provided at several storm and culvert outlets as a measure for erosion and sediment control where needed during and after the project.
9. Bridges will be designed to reduce the potential for scouring.
10. Underdrains will be used to minimize potential erosion caused by surface water flows by reducing the subsurface water which can cause failed pavements, unstable shoulders and other disturbed areas.
11. Covers will be placed on open ends of pipes in trenches.

The structural practices indicated above may not be used in every contract. The Erosion Control Plans included in every contract will indicate which structural practices are required for that contract.

**b. Storm Water Management**

Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

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- (i) Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on site; and sequential systems (which combine several practices). The practices selected for implementation were determined on the basis of the technical guidance in Section 10-300 (Design Considerations) in Chapter 10 (Erosion and Sedimentation Control) of the Illinois Department of Transportation Drainage Manual. If practices other than those discussed in Section 10-300 are selected for implementation or if practices are applied to situations different from those covered in Section 10-300, the technical basis for such decisions will be explained below.
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- (ii) Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).
- (iii) The Department proposes to remove vegetation within the project limits as necessary for construction. The Department proposes to revegetate according to the City of Chicago Landscape Framework Plan.

**c. Other Controls**

- (i) Waste Disposal. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.
- (ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

**d. Approved State or Local Plans**

The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual, 1995. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under permit ILR40 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials: See Landscape Design and Erosion Control for further details. In addition, Guidance Memorandums #02-14 and #02-22 leading up to the ILR40NPDES Permit Requirements IDOT Strategies of Storm Water Management will be complied with along with Construction Memorandum 02-60.

**3. Maintenance**

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan:

Construction equipment shall be stored and fueled only at designated locations. All necessary measures shall be taken to contain any fuel or pollution runoff in compliance with environmental law and EPA Water Quality Regulations. Leaking equipment or supplies shall be immediately repaired or removed from the site. The construction field engineer on a weekly basis shall inspect the project to determine that erosion controls efforts are in place and effective and if other control is necessary. Sediment collected during construction by the various temporary erosion systems shall be disposed on the site on a regular basis as directed by the Engineer.

All erosion and sediment control measures will be checked weekly and after each significant rainfall (13 mm (0.5 inch) or greater in a 24 hour period). The following items will be checked:

1. Seeding - all erodable bare earth areas will be temporarily seeded and inspected on a weekly basis to minimize the amount of erodable surface within the contract limits.
2. Silt Filter Fence, all types
3. Erosion Control Blanket
4. Tree Protection
5. Ditch Checks
6. Temporary slope drains
7. Sediment/dewatering basins
8. Stabilized construction entrances

All maintenance of the erosion control systems will be the responsibility of the contractor. All locations where vehicles enter and exit the construction site and all other areas subject to erosion should also be inspected periodically. Inspection of these areas shall be made at least once every seven days and within 24 hours of the end of each 13 mm (0.5 inch) or greater rainfall, or an equivalent snowfall.

#### 4. Inspections

Qualified personnel shall inspect disturbed areas of the construction site, which have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site. Such inspections shall be conducted at least once every seven (7)-calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater or equivalent snowfall.

- a. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.
- b. Based on the results of the inspection, the description of potential pollutant sources identified in section 1 above and pollution prevention measures identified in section 2 above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within 7 calendar days following the inspection.
- c. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section 4.b. shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI. G of the general permit.
- d. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer or Resident Technician shall complete and file an "Incidence of Noncompliance" (ION) report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the

noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit.

The report of noncompliance shall be mailed to the following address:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Attn: Compliance Assurance Section  
1021 North Grand East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

#### 5. Non-Storm Water Discharges

Except for flows from fire fighting activities, sources of non-storm water that is combined with storm water discharges associated with the industrial activity addressed in this plan must be described below. Appropriate pollution prevention measures, as described below, will be implemented for the non-storm water component(s) of the discharge.

Dewatering activities for footing and pier construction of retaining walls and bridges will be a source of non-storm water discharge during construction. Contractors should discharge dewatering activities to a temporary settling basing surrounded by silt fence.

The cutting of joints in PCC pavements or bridge deck grooving will result in slurry. This slurry must be contained on the deck/pavement and cleaned up.

An additional source of non-storm water discharge during construction is the slurry from washing out redi-mix concrete trucks. Redi-mix concrete trucks should wash out in in designated areas surrounded by silt fence. After all PCC items have been constructed, the dried concrete wash material should be cleaned up and properly disposed of. It will be the contractor's responsibility to secure these designated areas for the duration of their use. The Engineer must approve the locations.

On site maintenance of equipment must be performed in accordance with environmental law, such as proper storage and no dumping of old engine oil or other fluids on site.

#### Good Housekeeping

1. An effort will be made to store only enough product required to do the job.
2. All materials stored on site will be stored in a neat, orderly manner in their appropriate containers, and if possible, under a roof or other enclosure.
3. Products will be kept in their original containers with the original manufacturer's label.
4. Substances will not be mixed with one another unless recommended by the manufacturer.
5. The site superintendent will inspect daily to ensure proper use and disposal of materials on the site.
6. Whenever possible, all of a product will be used up before disposing of the container.
7. Follow manufacturer's recommended practices for use and disposal.



**CONTRACTOR CERTIFICATION  
STATEMENT**

This certification statement is a part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR40, issued by the Illinois Environmental Protection Agency on \_\_\_\_\_, 2003.

Project Information:

Route I-90/94 Dan Ryan Expressway Marked Dan Ryan Expressway  
I-57 at Illinois Route 1 (Halsted St)  
& I-90 at MLK to 31st Street

Section See individual contract Project No. Various Contract Numbers –  
Refer to Attachment

County Cook

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR 40) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

\_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City State

\_\_\_\_\_  
Zip Code

\_\_\_\_\_  
Telephone Number

Storm Water Pollution Prevention Plan – Attachment

Project Limits: Dan Ryan Expressway I-57 at Illinois Route 1 (Halsted St) & I-90 at MLK to 31st Street

Attachment: Contract Numbers and Description. Note that the contract numbers are listed in numerical order.

IDOT Contract No.	Description
62300	Reconstruct NB Express Lanes from 31st Street to 71st Street
62301	Reconstruct NB Local Lanes from 31st St. to 63rd and Misc. Ramps
62302	Reconstruct SB Express Lanes from 31st Street to 71st Street
62303	Reconstruct SB Local Lanes from 31st St. to 63rd and Misc. Ramps
62304	Reconstruct NB Mainline Lanes from 71st Street to I-57 Interchange and Reconstruction of the NB I-57 Bridge over the WB cross connection to I-94
62573	Shoulder Rehabilitation from 47th St. to 71st St.
62580	NB Elevated Bridge Repair from 15th to 28th Streets
62581	SB Elevated Bridge Repair from 15th to 28th Streets
62584	Reconstruct NB ramps between 31st and 39th Street and Shoulder Rehabilitation
62585	Reconstruct SB ramps between 31st and 39th Street and Shoulder Rehabilitation
62586	Reconstruct 57th St. Bridge, and Frontage Rds., Retaining Walls, and Ramps between 47th and 59th. Streets
62587	Wentworth Avenue Overpass Reconstruction and Wells Street Realignments
62589	Skyway Interchange Bridges and Local Lanes from Wentworth Avenue to 67th Street
62590	Reconstruct 67th St. Bridge and NB and SB C-D System between 67th and 71st St.
62591	Storm sewer jacking and collector sewers fom 67th Street to 95th Street
62593	Reconstruct SB Mainline lanes from 71st Street to I-57 Interchange
62594	Reconstruct NB and SB C-D System and Ramps between 79th and 83rd Streets
62691	Reconstruct Watermain crossings under Dan Ryan from 32nd to 63 <sup>rd</sup>
62692	Reconstruct Watermain Crossings Under the Dan Ryan from 75th St. to I-57 Interchange
62693	Frontage Rds., Retaining Walls, and Ramps between 59th. and 63rd.
62694	Reconstruct NB Retaining Walls & Ramps from 71st to I-57 Interchange, and 71st to 75th C-D System
62695	Reconstruct SB Retaining Walls & Ramps from 71st to I-57 Interchange, and 71st to 75th C-D System

## **PAVEMENT REMOVAL AND REPLACEMENT**

Description. This work shall consist of removal and replacement of existing pavement as shown in the plans.

Method of Measurement. This work shall be measured for payment in square yards.

Basis of Payment. This work shall be paid for at the contract unit price per square yard for PAVEMENT REMOVAL AND REPLACEMENT, which price shall be full compensation for all labor, equipment and materials required for performing the work as herein specified.

## **EXPLORATORY EXCAVATION**

Description. This work shall consist of hand excavation of areas in the vicinity of underground utilities. The engineer must approve this work beforehand and be present during the execution of this work. The engineer will quantify the amount of hand excavation for each exploration performed and the engineer and contractor will agree, in writing, on this quantity before the contractor resumes mechanical excavation.

Method of Measurement. This work shall be measured for payment in cubic yards.

Basis of Payment. This work shall be paid for at the contract unit price per cubic yard for EXPLORATORY EXCAVATION, which price shall be full compensation for all labor, equipment and materials required for performing the work as herein specified.

## **REINFORCEMENT BARS - STORAGE AND PROTECTION (BDE)**

Effective: August 1, 2008

Revise Article 508.03 of the Standard Specifications to read:

**“508.03 Storage and Protection.** Reinforcement bars, when delivered on the job, shall be stored off the ground using platforms, skids, or other supports; and shall be protected from mechanical injury and from deterioration by exposure. Epoxy coated bars shall be stored on wooden or padded steel cribbing and all systems for handling shall have padded contact areas. The bars or bundles shall not be dragged or dropped.

When it is necessary to store epoxy coated bars outside for more than two months, they shall be protected from sunlight, salt spray, and weather exposure. The protection shall consist of covering with opaque polyethylene sheeting or other suitable opaque material. The covering shall be secured and allow for air circulation around the bars to minimize condensation under the cover.

When placed in the work the bars shall be free from dirt, detrimental scale, paint, oil, or other foreign substances. A light coating of rust will not be considered objectionable on black bars.”

## **ILLINOIS DEPARTMENT OF LABOR**

### **PREVAILING WAGES FOR COOK COUNTY EFFECTIVE OCTOBER 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 October 2008

Trade Name	RG	TYP	C	Base	FRMAN	*M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng
=====	==	==	=	=====	=====	=====	==	==	=====	=====	=====	=====
ASBESTOS ABT-GEN		ALL		34.750	35.250	1.5	1.5	2.0	8.830	6.170	0.000	0.270
ASBESTOS ABT-MEC		BLD		29.930	0.000	1.5	1.5	2.0	9.170	9.260	0.000	0.320
BOILERMAKER		BLD		39.450	43.000	2.0	2.0	2.0	6.720	8.490	0.000	0.300
BRICK MASON		BLD		38.030	41.830	1.5	1.5	2.0	8.000	9.970	0.000	0.550
CARPENTER		ALL		39.770	41.770	1.5	1.5	2.0	9.460	7.790	0.000	0.490
CEMENT MASON		ALL		41.850	43.850	2.0	1.5	2.0	7.850	7.410	0.000	0.170
CERAMIC TILE FNSHER		BLD		32.150	0.000	2.0	1.5	2.0	6.150	7.370	0.000	0.380
COMM. ELECT.		BLD		35.440	37.940	1.5	1.5	2.0	7.400	7.660	0.000	0.700
ELECTRIC PWR EQMT OP		ALL		38.600	44.970	1.5	1.5	2.0	9.110	11.34	0.000	0.290
ELECTRIC PWR GRNDMAN		ALL		30.110	44.970	1.5	1.5	2.0	7.120	8.850	0.000	0.230
ELECTRIC PWR LINEMAN		ALL		38.600	44.970	1.5	1.5	2.0	9.110	11.34	0.000	0.290
ELECTRICIAN		ALL		39.400	42.000	1.5	1.5	2.0	10.83	8.740	0.000	0.750
ELEVATOR CONSTRUCTOR		BLD		43.925	49.420	2.0	2.0	2.0	8.775	6.960	2.640	0.000
FENCE ERECTOR		ALL		28.640	30.140	1.5	1.5	2.0	7.750	5.970	0.000	0.350
GLAZIER		BLD		37.000	38.500	1.5	1.5	2.0	7.340	12.05	0.000	0.690
HT/FROST INSULATOR		BLD		39.900	42.400	1.5	1.5	2.0	9.170	10.46	0.000	0.320
IRON WORKER		ALL		40.250	42.250	2.0	2.0	2.0	9.950	14.74	0.000	0.300
LABORER		ALL		34.750	35.500	1.5	1.5	2.0	8.830	6.170	0.000	0.270
LATHER		ALL		39.770	41.770	1.5	1.5	2.0	9.460	7.790	0.000	0.490
MACHINIST		BLD		40.530	42.530	1.5	1.5	2.0	7.000	7.670	0.650	0.000
MARBLE FINISHERS		ALL		28.650	0.000	1.5	1.5	2.0	7.920	9.970	0.000	0.550
MARBLE MASON		BLD		38.030	41.830	1.5	1.5	2.0	8.000	9.970	0.000	0.550
MATERIAL TESTER I		ALL		24.750	0.000	1.5	1.5	2.0	8.830	6.170	0.000	0.270
MATERIALS TESTER II		ALL		29.750	0.000	1.5	1.5	2.0	8.830	6.170	0.000	0.270
MILLWRIGHT		ALL		39.770	41.770	1.5	1.5	2.0	9.460	7.790	0.000	0.490
OPERATING ENGINEER		BLD	1	43.800	47.800	2.0	2.0	2.0	9.600	6.550	1.900	1.000
OPERATING ENGINEER		BLD	2	42.500	47.800	2.0	2.0	2.0	9.600	6.550	1.900	1.000
OPERATING ENGINEER		BLD	3	39.950	47.800	2.0	2.0	2.0	9.600	6.550	1.900	1.000
OPERATING ENGINEER		BLD	4	38.200	47.800	2.0	2.0	2.0	9.600	6.550	1.900	1.000
OPERATING ENGINEER		FLT	1	47.250	47.250	1.5	1.5	2.0	6.850	5.600	1.900	0.000
OPERATING ENGINEER		FLT	2	45.750	47.250	1.5	1.5	2.0	6.850	5.600	1.900	0.000
OPERATING ENGINEER		FLT	3	40.700	47.250	1.5	1.5	2.0	6.850	5.600	1.900	0.000
OPERATING ENGINEER		FLT	4	33.850	47.250	1.5	1.5	2.0	6.850	5.600	1.900	0.000
OPERATING ENGINEER		HWY	1	42.000	46.000	1.5	1.5	2.0	9.600	6.550	1.900	1.000
OPERATING ENGINEER		HWY	2	41.450	46.000	1.5	1.5	2.0	9.600	6.550	1.900	1.000
OPERATING ENGINEER		HWY	3	39.400	46.000	1.5	1.5	2.0	9.600	6.550	1.900	1.000
OPERATING ENGINEER		HWY	4	38.000	46.000	1.5	1.5	2.0	9.600	6.550	1.900	1.000
OPERATING ENGINEER		HWY	5	36.800	46.000	1.5	1.5	2.0	9.600	6.550	1.900	1.000
ORNAMNTL IRON WORKER		ALL		39.050	41.300	2.0	2.0	2.0	7.950	13.19	0.000	0.500
PAINTER		ALL		36.900	41.510	1.5	1.5	1.5	7.350	8.400	0.000	0.420
PAINTER SIGNS		BLD		29.920	33.590	1.5	1.5	1.5	2.600	2.390	0.000	0.000
PILEDRIIVER		ALL		39.770	41.770	1.5	1.5	2.0	9.460	7.790	0.000	0.490
PIPEFITTER		BLD		42.050	45.050	1.5	1.5	2.0	7.660	8.550	0.000	1.370
PLASTERER		BLD		38.100	40.390	1.5	1.5	2.0	7.500	8.440	0.000	0.400
PLUMBER		BLD		43.000	45.000	1.5	1.5	2.0	9.110	5.960	0.000	1.030
ROOFER		BLD		35.000	38.000	1.5	1.5	2.0	6.800	3.870	0.000	0.330
SHEETMETAL WORKER		BLD		33.400	36.070	1.5	1.5	2.0	6.460	7.850	0.000	0.590
SIGN HANGER		BLD		26.510	27.360	1.5	1.5	2.0	4.200	2.280	0.000	0.000
SPRINKLER FITTER		BLD		40.500	42.500	1.5	1.5	2.0	8.500	6.850	0.000	0.500
STEEL ERECTOR		ALL		40.250	42.250	2.0	2.0	2.0	9.950	14.74	0.000	0.300
STONE MASON		BLD		38.030	41.830	1.5	1.5	2.0	8.000	9.970	0.000	0.550
TERRAZZO FINISHER		BLD		33.810	0.000	1.5	1.5	2.0	6.150	9.850	0.000	0.310
TERRAZZO MASON		BLD		37.390	40.390	1.5	1.5	2.0	6.150	11.11	0.000	0.350
TILE MASON		BLD		38.630	42.630	2.0	1.5	2.0	6.150	9.010	0.000	0.500
TRAFFIC SAFETY WRKR		HWY		24.300	25.900	1.5	1.5	2.0	3.780	1.875	0.000	0.000
TRUCK DRIVER	E	ALL	1	30.700	31.350	1.5	1.5	2.0	6.750	5.450	0.000	0.150
TRUCK DRIVER	E	ALL	2	30.950	31.350	1.5	1.5	2.0	6.750	5.450	0.000	0.150
TRUCK DRIVER	E	ALL	3	31.150	31.350	1.5	1.5	2.0	6.750	5.450	0.000	0.150



TRUCK DRIVER	E	ALL	4	31.350	31.350	1.5	1.5	2.0	6.750	5.450	0.000	0.150
TRUCK DRIVER	W	ALL	1	32.550	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.000
TRUCK DRIVER	W	ALL	2	32.700	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.000
TRUCK DRIVER	W	ALL	3	32.900	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.000
TRUCK DRIVER	W	ALL	4	33.100	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.000
TUCKPOINTER		BLD		38.200	39.200	1.5	1.5	2.0	6.580	9.550	0.000	0.280

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 material 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 installation 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 exteriors 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 exterior which were 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; Rotary 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.