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

## PREQUALIFICATION

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

## REQUESTS FOR AUTHORIZATION TO BID

Contractors 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 an Authorization to Bid or Not for Bid Report, approved by the Central Bureau of Construction that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Authorization to Bid or Not for Bid Report will indicate the reason for denial.

ABOUT AUTHORIZATION TO BID: Firms that have not received an authorization 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
Technical Questions about downloading these files may be directed to Tim Garman (217)524-1642 or Timothy.Garman@illinois.gov.

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

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

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

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

| WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED? |  |
| :--- | :---: |
| Questions Regarding | Call |
| Prequalification and/or Authorization to Bid | $217 / 782-3413$ |
| Preparation and submittal of bids | $217 / 782-7806$ |
| Mailing of plans and proposals | $217 / 782-7806$ |

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 and addendum or revision could result in a bid being rejected as irregular.

RETURN WITH BID

| Proposal Submitted By <br> Name |
| :--- |
| Address |
| City |
| January 15, 2010 |

## Letting January 15, 2010

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 BondSpringfield, Illinois 62764
Contract No. 93504
MORGAN County
Section 05-00121-00-PV (Jacksonville)
Various Routes
Project ARA-HPP-4097(005)
District 6 Construction Funds

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

## 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 Authorization to Bid/or Not For Bid" form, he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued an Authorization to Bid or Not for Bid Report, approved by the Central Bureau of Construction that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Authorization to Bid or Not for Bid Report will indicate the reason for denial. If a contractor has requested to bid but has not received a Authorization to Bid or Not for Bid Report, 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

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of $\qquad$
$\qquad$
Taxpayer Identification Number (Mandatory) $\qquad$
for the improvement identified and advertised for bids in the Invitation for Bids as:
```
Contract No. 93504
MORGAN County
Section 05-00121-00-PV (Jacksonville)
Project ARA-HPP-4097(005)
Various Routes
District 6 Construction Funds
```

This project consists of removing existing pavements, curb and gutter, sidewalk and medians and constructing new concrete curb and gutter roadways with HMA base, binder and surface courses, storm sewer, water main, concrete sidewalk, landscaping, lighting and all other incidental items to complete the work on Mauvaiseterre, Sandy, Court, Morgan ans State Streets that collectively form the Jacksonville Downtown Central Park Plaza.
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:

| Amount of Bid |  |  | Proposal Guaranty | Amount of Bid |  |  | Proposal Guaranty |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 $\qquad$
Section No. $\qquad$
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 <br> No. | Sections Included in Combination | Combination Bid <br> Dollars |  |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

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.






| $\begin{aligned} & \text { VARIOUS } \\ & 05-00121-0 \\ & \text { MORGAN } \end{aligned}$ | -PV (JACKSONVILLE) | ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 93504 |  | ```ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 11/04/09 RUN TIME - 183331``` |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITEM |  | UNIT OF |  | UNIT PR |  | TOTAL PR |  |
| NUMBER | PAY ITEM DESCR | IPTION MEASURE | QUANTITY | DOLLARS | CENTS | DOLLARS | CTS |
| 42001300 | PROTECTIVE COAT | SQ YD | 12,799.000 X |  |  |  |  |
| 42400100 | PC CONC SIDEWALK 4 | SQ FT | 51,810.000 X |  |  |  |  |
| 42400800 | DETECTABLE WARNINGS | SQ FT | $397.000 \times$ |  |  |  |  |
| 44000100 | PAVEMENT REM | SQ YD | 1,961.000 X |  |  |  |  |
| 44000198 | HMA SURF REM VAR DP | SQ YD | 7,309.000 X |  |  |  |  |
| 44000500 | COMB CURB GUTTER REM | FOOT | 3,187.000 X |  |  |  |  |
| 44000600 | SIDEWALK REM | SQ FT | 100,782.000 X |  |  |  |  |
| 44002020 | CONC MEDIAN SURF REM | SQ FT | 2,965.000 X |  |  |  |  |
| 44201335 | CL C PATCH T4 8 | SQ YD | $807.000 \times$ |  |  |  |  |
| 550B0040 | STORM SEW CL B 110 | FOOT | $140.000 \times$ |  |  |  |  |
| 55039700 | SS CLEANED | FOOT | 1,200.000 X |  |  |  |  |
| 55100500 | STORM SEWER REM 12 | FOOT | $586.000 \times$ |  |  |  |  |
| 56100500 | WATER MAIN 4 | FOOT | $44.000 \times$ |  |  |  |  |
| 56100600 | WATER MAIN 6 | F00T | 1,487.000 X |  |  |  |  |
| 56100800 | WATER MAIN 10 | FOOT | $676.000 \times$ |  |  |  |  |


| $\begin{aligned} & \text { VARIOUS } \\ & 05-00121-00- \\ & \text { IRGAN } \end{aligned}$ | -PV (JACKSONVILLE) | ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 93504 |  | ```ECMS002 DTGECMO3 ECMR003 PAGE RUN DATE - 11/04/09 RUN TIME - 183331``` |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITEM |  | UNIT OF |  | UNIT PR |  | TOTAL PRIC |  |
| NUMBER | PAY ITEM DESCRI | IPTION MEASURE | QUANTITY | DOLLARS | CENTS | DOLLARS | CTS |
| 56104800 W | Water valves 4 | EACH | $41.000 \times$ |  | $=$ |  |  |
| 56104900 W | Water valves 6 | EACH | $13.000 \times$ |  | $=$ |  |  |
| 56105100 W | water valves 10 | EACH | $7.000 \times$ |  |  |  |  |
| 56106200 A | ADJ WATER MAIN 4 | FOOT | $200.000 \times$ |  |  |  |  |
| 56106300 | adj water main 6 | FOOT | $200.000 \times$ |  |  |  |  |
| 56106400 A | adu water main 8 | FOOT | $200.000 \times$ |  |  |  |  |
| 56106500 A | adu water main 10 | FOOT | 200.000 x |  |  |  |  |
| 56201120 W | WATER SERV LINE 4 | FOOT | $470.000 \times$ |  |  |  |  |
| 56300100 | adj san sewer 8 Less | FOOT | $400.000 \times$ |  |  |  |  |
| 56300300 | ADJ WATER SERV LINES | FOOT | $200.000 \times$ |  |  |  |  |
| 56400300 F | Fire hydnts to be adu | $J$ EACH | 1.000 x |  |  |  |  |
| 56400500 F | FIRE HYDNTS TO BE REM | M EACH | $8.000 \times$ |  |  |  |  |
| 56500600 | dom wat ser box adu | EACH | $2.000 \times$ |  |  |  |  |
| 60218400 N | man ta 4 dia tif Cl | EACH | 3.000 x |  |  |  |  |
| 60219300 N | Man ta 4 dia T11F\&G | EACH | $2.000 \times$ |  |  |  |  |





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 MULTPLIED 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.
NOTE:

# RETURN WITH BID <br> STATE REQUIRED ETHICAL <br> STANDARDS GOVERNING CONTRACT <br> PROCUREMENT: ASSURANCES, CERTIFICATIONS <br> 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 lllinois 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 $71 / 2 \%$ of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
(c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than $15 \%$, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
(d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.
(e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 days after the officer, member, or employee takes office or is employed.

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

## 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 lllinois 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 lllinois 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:
$\S 33 \mathrm{E}-11$. (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.

## RETURN WITH BID

## 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 lllinois Procurement Code, Section 50-60(c), provides:

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 lllinois 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 lllinois or a State agency by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The contractor acknowledges that the contracting agency may declare the contract void if this certification is false.

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

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

## NA - FEDERAL

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

## L. Executive Order Number 1 (2007) Regarding Lobbying on Government Procurements

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

## RETURN WITH BID

## M. Disclosure of Business Operations in Iran

Section 50-36 of the Illinois Procurement Code, 30ILCS 500/50-36 provides that each bid, offer, or proposal submitted for a State contract shall include a disclosure of whether or not the Company acting as the bidder, offer or, or proposing entity, or any of its corporate parents or subsidiaries, within the 24 months before submission of the bid, offer, or proposal had business operations that involved contracts with or provision of supplies or services to the Government of Iran, companies in which the Government of Iran has any direct or indirect equity share, consortiums or projects commissioned by the Government of Iran, or companies involved in consortiums or projects commissioned by the Government of Iran and either of the following conditions apply:
(1) More than $10 \%$ of the Company's revenues produced in or assets located in Iran involve oil-related activities or mineral-extraction activities; less than $75 \%$ of the Company's revenues produced in or assets located in Iran involve contracts with or provision of oil-related or mineral-extraction products or services to the Government of Iran or a project or consortium created exclusively by that government; and the Company has failed to take substantial action.
(2) The Company has, on or after August 5, 1996, made an investment of $\$ 20$ million or more, or any combination of investments of at least $\$ 10$ million each that in the aggregate equals or exceeds $\$ 20$ million in any 12-month period, which directly or significantly contributes to the enhancement of Iran's ability to develop petroleum resources of Iran.

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

Failure to make the disclosure required by the Code shall cause the bid, offer or proposal to be considered not responsive. The disclosure will be considered when evaluating the bid, 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:
$\qquad$ / Company has no business operations in Iran to disclose.
$\qquad$
$\qquad$ Company has business operations in Iran as disclosed the attached document.

## N. Political Contributions and Registration with the State Board of Elections

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

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

The undersigned business entity certifies that it has registered as a business with the State Board of Elections and acknowledges a continuing duty to update the registration in accordance with the above referenced statutes. A copy of the certificate of registration shall be submitted with the bid. The bidder is cautioned that the Department will not award a contract without submission of the certificate of registration.

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

## 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 10 K reporting, in which case it may submit its 10 K 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.

## 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 10 K reporting, the 10 K Report may be submitted to meet the requirements of Form A . If a bidder is a privately held entity that is exempt from Federal 10 K 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 $\qquad$ 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 $\qquad$ NO
3. Does anyone in your organization receive more than $\$ 106,447.20$ 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 $\qquad$ NO $\qquad$
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 $\$ 106,447.20$ ? YES $\qquad$ NO $\qquad$
(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:


## ILLINOIS DEPARTMENT OF TRANSPORTATION

| Contractor Name |  |  |  |
| :--- | :--- | :--- | :---: |
| Legal Address | Email Address |  |  |
| City, State, Zip |  |  |  |
| Telephone Number |  |  |  |

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.

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 $\$ 106,447.20$ ( $60 \%$ of the Governor's salary as of $3 / 1 / 09$ ). (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 $\qquad$ No $\qquad$
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 $\qquad$ No $\qquad$
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 $\$ 106,447.20$, ( $60 \%$ of the Governor's salary as of $3 / 1 / 09$ ) 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 $\$ 106,447.20$, ( $60 \%$ of the Governor's salary as of $3 / 1 / 09$ ) are you entitled to receive (i) more than $71 / 2 \%$ of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes $\qquad$ No
4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds $\$ 106,447.20$, ( $60 \%$ of the Governor's salary as of $3 / 1 / 09$ ) are you and your spouse or minor children entitled to receive (i) more than $15 \%$ in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor?

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

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

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 $\qquad$ No $\qquad$
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 \$106,447.20, (60\% of the Governor's salary as of $3 / 1 / 09$ ) provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary.
3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds $\$ 106,447.20 .00$, ( $60 \%$ of the salary of the Governor as of $3 / 1 / 09$ ) are you entitled to receive (i) more than $71 / 2 \%$ of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor?

Yes $\qquad$ No
4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of lllinois, and his/her annual salary exceeds $\$ 106,447.20$, ( $60 \%$ of the Governor's salary as of $3 / 1 / 09$ ) are you and your spouse or any minor children entitled to receive (i) more than $15 \%$ in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor?

Yes $\qquad$ No
(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years.

Yes $\qquad$ No
(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes $\qquad$ No $\qquad$
(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of lllinois or the statues of the State of lllinois, 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.
$\qquad$ No

## RETURN WITH BID/OFFER

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes $\qquad$ No $\qquad$
(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.
$\qquad$
es

## APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page.
Completed by:
Signature of Individual or Authorized Representative
Date
NOT APPLICABLE STATEMENT
I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

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

## ILLINOIS DEPARTMENT OF TRANSPORTATION

## Form B <br> Other Contracts \& <br> Procurement Related Information Disclosure

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

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 $\qquad$ No $\qquad$ 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
$\square$

## 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. 93504
MORGAN County
Section 05-00121-00-PV (Jacksonville)
Project ARA-HPP-4097(005)
Various Routes
District 6 Construction Funds

## PART I. IDENTIFICATION

Dept. Human Rights \# $\qquad$ Duration of Project: $\qquad$
Name of Bidder:
PART II. WORKFORCE PROJECTION
A. The undersigned bidder has analyzed minority group and female populations, unemployment rates and availability of workers for the location in which this contract work is to be performed, and for the locations from which the bidder recruits employees, and hereby submits the following workforce projection including a projection for minority and female employee utilization in all job categories in the workforce to be allocated to this contract:

| TOTAL Workforce Projection for Contract |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | MINORITY EMPLOYEES |  |  |  |  |  | TRAINEES |  |  |  |
| $\begin{gathered} \hline \text { JOB } \\ \text { CATEGORIES } \end{gathered}$ | TOTAL EMPLOYEES |  | BLACK |  | HISPANIC |  | *OTHER MINOR. |  | APPRENTICES |  | ON THE JOB TRAINEES |  |
|  | M | F | M | F | M | F | M | F | M | F | M | F |
| OFFICIALS (MANAGERS) |  |  |  |  |  |  |  |  |  |  |  |  |
| SUPERVISORS |  |  |  |  |  |  |  |  |  |  |  |  |
| FOREMEN |  |  |  |  |  |  |  |  |  |  |  |  |
| CLERICAL |  |  |  |  |  |  |  |  |  |  |  |  |
| EQUIPMENT OPERATORS |  |  |  |  |  |  |  |  |  |  |  |  |
| MECHANICS |  |  |  |  |  |  |  |  |  |  |  |  |
| TRUCK DRIVERS |  |  |  |  |  |  |  |  |  |  |  |  |
| IRONWORKERS |  |  |  |  |  |  |  |  |  |  |  |  |
| CARPENTERS |  |  |  |  |  |  |  |  |  |  |  |  |
| CEMENT MASONS |  |  |  |  |  |  |  |  |  |  |  |  |
| ELECTRICIANS |  |  |  |  |  |  |  |  |  |  |  |  |
| PIPEFITTERS, PLUMBERS |  |  |  |  |  |  |  |  |  |  |  |  |
| PAINTERS |  |  |  |  |  |  |  |  |  |  |  |  |
| LABORERS, SEMI-SKILLED |  |  |  |  |  |  |  |  |  |  |  |  |
| LABORERS, |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL |  |  |  |  |  |  |  |  |  |  |  |  |


| CURRENT EMPLOYEES TO BE ASSIGNED TO CONTRACT |  |  |  |
| :---: | :---: | :---: | :---: |
| TOTAL EMPLOYEES |  | MINORITY EMPLOYEES |  |
| M | F | M | F |
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TABLE C

| TOTAL Training Projection for Contract |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EMPLOYEES <br> IN TRAINING | TOTAL EMPLOYEES |  | BLACK |  | HISPANIC |  | *OTHER MINOR. |  |
|  | M | F | M | F | M | F | M | F |
| APPRENTICES |  |  |  |  |  |  |  |  |
| ON THE JOB TRAINEES |  |  |  |  |  |  |  |  |

Note: See instructions on page 2

# Contract No. 93504 <br> MORGAN County <br> Section 05-00121-00-PV (Jacksonville) <br> Project ARA-HPP-4097(005) <br> Various Routes <br> District 6 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) $\qquad$ 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) $\qquad$ persons will be directly employed by the prime contractor and that (number) $\qquad$ 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 $\qquad$ Telephone Number $\qquad$

Address $\qquad$

## 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 only if revisions are required.

Signature: $\square \ldots$ 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

## ADDITIONAL FEDERAL REQUIREMENTS

In addition to the Required Contract Provisions for Federal-Aid Construction Contracts (FHWA 1273), all bidders make the following certifications.
A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.

## B. CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:

1. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES $\qquad$ NO $\qquad$
2. If answer to \#1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES $\qquad$ NO $\qquad$

## RETURN WITH BID

Contract No. 93504
MORGAN County
Section 05-00121-00-PV (Jacksonville)
Project ARA-HPP-4097(005)
Various Routes
District 6 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 |  |



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

Attest $\qquad$
Business Address $\qquad$

[^0]
## -21-

## Return with Bid

Division of Highways Proposal Bid Bond

Item No.
Letting Date
$\qquad$

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 $\qquad$ A.D.,

## SURETY

By:
(Company Name)
$\qquad$
(Signature of Attorney-in-Fact)

By
(Signature \& Title)

Notary Certification for Principal and Surety
STATE OF ILLINOIS,
County of
I, $\qquad$ , 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 $\qquad$ day of $\qquad$ 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.

## PROPOSAL ENVELOPE

## PROPOSALS

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

| Item No. | Item No. | Item No. |
| :---: | :---: | :---: |
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Submitted By:

| Name: |
| :--- |
| Address: |
|  |
|  |
| Phone No. |

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

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

## NOTICE

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

# CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS 

## NOTICE

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

Contract No. 93504
MORGAN County
Section 05-00121-00-PV (Jacksonville)
Project ARA-HPP-4097(005)
Various Routes
District 6 Construction Funds

## NOTICE TO BIDDERS

1. TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., January 15, 2010. 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. 93504<br>MORGAN County<br>Section 05-00121-00-PV (Jacksonville)<br>Project ARA-HPP-4097(005)<br>Various Routes<br>District 6 Construction Funds

This project consists of removing existing pavements, curb and gutter, sidewalk and medians and constructing new concrete curb and gutter roadways with HMA base, binder and surface courses, storm sewer, water main, concrete sidewalk, landscaping, lighting and all other incidental items to complete the work on Mauvaiseterre, Sandy, Court, Morgan ans State Streets that collectively form the Jacksonville Downtown Central Park Plaza.
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
Gary Hannig,
Acting Secretary

# INDEX <br> FOR <br> SUPPLEMENTAL SPECIFICATIONS <br> AND RECURRING SPECIAL PROVISIONS 

Adopted January 1, 2010

## 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 1-1-10)

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| :---: | :---: | :---: | :---: | :---: | :---: |
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| LR SD 13 |  | $\square$ | Required Cold Milled Surface Texture | Nov．1， 1987 | Jan．1， 2007 |
| LR 102 |  |  | Protests on Local Lettings | Jan．1， 2006 |  |
| LR 105 | 68 | 区 | Cooperation with Utilities | Jan．1， 1999 | Jan．1， 2007 |
| LR 107－2 |  |  | Railroad Protective Liability Insurance for Local Lettings | Mar．1， 2005 | Jan．1， 2006 |
| LR 107－3 |  |  | Disadvantaged Business Enterprise Participation | Jan．1， 2007 | Nov．1， 2008 |
| LR 107－4 | 71 | 区 | Insurance | Feb．1， 2007 | Aug．1， 2007 |
| LR 107－5 |  |  | Substance Abuse Prevention Program | Jan．1， 2008 | Jan．8， 2008 |
| LR 108 |  |  | Combination Bids | Jan．1， 1994 | Mar．1， 2005 |
| LR 212 |  |  | Shaping Roadway | Aug．1， 1969 | Jan．1， 2002 |
| LR 355－1 |  | $\square$ | Asphalt Stabilized Base Course，Road Mix or Traveling Plant Mix | Oct．1， 1973 | Jan．1， 2007 |
| LR 355－2 |  |  | Asphalt Stabilized Base Course，Plant Mix | Feb．20， 1963 | Jan．1， 2007 |
| LR 400－1 |  |  | Bituminous Treated Earth Surface | Jan．1， 2007 | Jan．1， 2008 |
| LR 400－2 |  |  | Bituminous Surface Mixture（Class B） | Jan．1， 2008 |  |
| LR 402 |  |  | Salt Stabilized Surface Course | Feb．20， 1963 | Jan．1， 2007 |
| LR 403－2 |  |  | Bituminous Hot Mix Sand Seal Coat | Aug．1， 1969 | Jan．1， 2007 |
| LR 406 |  |  | Filling HMA Core Holes with Non－shrink Grout | Jan．1， 2008 |  |
| LR 420 |  |  | PCC Pavement（Special） | May 12， 1964 | Jan．2， 2007 |
| LR 442 |  |  | Bituminous Patching Mixtures for Maintenance Use | Jan．1， 2004 | Jun．1， 2007 |
| LR 451 |  | $\square$ | Crack Filling Bituminous Pavement with Fiber－Asphalt | Oct．1， 1991 | Jan．1， 2007 |
| LR 503－1 |  |  | Furnishing Class SI Concrete | Oct．1， 1973 | Jan．1， 2002 |
| LR 503－2 |  |  | Furnishing Class SI Concrete（Short Load） | Jan．1， 1989 | Jan．1， 2002 |
| LR 542 |  |  | Pipe Culverts，Type＿＿＿＿（Furnished） | Sep．1， 1964 | Jan．1， 2007 |
| LR 663 |  |  | Calcium Chloride Applied | Jun．1， 1958 | Jan．1， 2007 |
| LR 702 | 72 | 区 | Construction and Maintenance Signs | Jan．1， 2004 | Jun．1， 2007 |
| LR 1004 |  |  | Coarse Aggregate for Bituminous Surface Treatment | Jan．1， 2002 | Jan．1， 2007 |
| LR 1013 |  | $\square$ | Rock Salt（Sodium Chloride） | Aug．1， 1969 | Jan．1， 2002 |
| LR 1030 |  |  | Growth Curve | Mar．1， 2008 |  |
| LR 1032－1 |  | $\square$ | Emulsified Asphalts | Jan．1， 2007 | Feb．7， 2008 |
| LR 1032－2 |  | $\square$ | Multigrade Cold Mix Asphalt | Jan．1， 2007 | Feb．1， 2007 |
| LR 1102 |  | $\square$ | Road Mix or Traveling Plan Mix Equipment | Jan．1， 2007 |  |

## BDE SPECIAL PROVISIONS

For the January 15 and March 5, 2010 Lettings
The following special provisions indicated by an " $x$ " are applicable to this contract. An *indicates a new or revised special provision for the letting.

| File Name | Pg\# |  | Special Provision Title | Effective | Revised |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 80240 |  |  | Above Grade Inlet Protection | July 1,2009 |  |
| 0099 |  |  | Accessible Pedestrian Signals (APS) | April 1, 2003 | Jan. 1, 2007 |
| 80243 | 73 | X | American Recovery and Reinvestment Act Provisions | April 1, 2009 |  |
| 80236 | 74 | X | American Recovery and Reinvestment Act Signing | April 1, 2009 | April 15, 2009 |
| 80186 |  |  | Alkali-Silica Reaction for Cast-in-Place Concrete | Aug. 1, 2007 | Jan. 1, 2009 |
| 80213 | $\begin{aligned} & 80 \\ & 83 \end{aligned}$ | X | Alkali-Silica Reaction for Precast and Precast Prestressed Concrete | Jan. 1, 2009 |  |
| 80207 |  | X | Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas Inside Illinois State Borders | Nov. 1, 2008 |  |
| 80192 |  |  | Automated Flagger Assistance Device | Jan. 1, 2008 |  |
| 80173 |  |  | Bituminous Materials Cost Adjustments | Nov. 2, 2006 | April 1, 2009 |
| 80241 |  |  | Bridge Demolition Debris | July 1, 2009 |  |
| 50261 |  |  | Building Removal-Case I (Non-Friable and Friable Asbestos) | Sept. 1, 1990 | Jan. 1, 2007 |
| 50481 |  |  | Building Removal-Case 11 (Non-Friable Asbestos) | Sept. 1, 1990 | Jan. 1, 2007 |
| 50491 |  |  | Building Removal-Case III (Friable Asbestos) | Sept. 1, 1990 | Jan. 1, 2007 |
| 50531 |  |  | Building Removal-Case IV (No Asbestos) | Sept. 1, 1990 | Jan. 1, 2007 |
| 80166 84  <br> 80198   <br>    |  |  | Cement | Jan. 1, 2007 | April 1, 2009 |
|  |  |  | Completion Date (via calendar days) | April 1, 2008 |  |
| $80199$ |  |  | Completion Date (via calendar days) Plus Working Days | April 1, 2008 |  |
| 80094 87 $X$ <br>    |  |  | Concrete Admixtures | Jan. 1, 2003 | April 1, 2009 |
| 80214 |  |  | Concrete Gutter, Type A | Jan. 1, 2009 |  |
| 80215 |  |  | Concrete Joint Sealer | Jan. 1, 2009 |  |
| 80226 |  |  | Concrete Mix Designs | April 1, 2009 |  |
| $\begin{array}{ll}80237 \\ 80239 & 91\end{array}$ |  |  | Construction Air Quality - Diesel Vehicle Emissions Control | April 1, 2009 | July 1, 2009 |
|  |  | X | Construction Air Quality - Idling Restrictions | April 1, 2009 |  |
| 8022795 |  | X | Determination of Thickness | April 1, 2009 |  |
| 80177 |  |  | Digital Terrain Modeling for Earthwork Calculations | April 1, 2007 |  |
| F= 80029 107 |  |  | Disadvantaged Business Enterprise Paricipation $2 \times 2=4$ | Sept. 1, 2000 | dan 1,2010 |
| $\begin{array}{ll}80178 & 115 \\ 80179 & \end{array}$ |  | X | Dowel Bars | April 1, 2007 | Jan. 1, 2008 |
|  |  |  | Engineer's Field Office Type A | April 1, 2007 | Aug. 1, 2008 |
| 80205 |  |  | Engineer's Field Office Type B | Aug. 1, 2008 |  |
| 80189 | 116 | X | Equipment Rental Rates | Aug. 2, 2007 | Jan. 2, 2008 |
| 14.80244 |  |  |  | Nove 1 2009 | dan 1, 2010 |
| 80228 |  |  | Flagger at Side Roads and Entrances | April 1, 2009 |  |
| \%ax 80249 |  |  | Frames and Gratesicmux madrusunde | Jan 412010 | 48 |
| $80229$ |  |  | Fuel Cost Adjustment | April 1, 2009 | July 1, 2009 |
| $80169$ |  |  | High Tension Cable Median Barrier | Jan. 1, 2007 | April 1, 2009 |
| $80194$ |  |  | HMA - Hauling on Partially Completed Full-Depth Pavement | Jan. 1, 2008 |  |
| 80245118 |  | X | Hot-Mix Asphalt - Anti-Stripping Additive | Nov. 1, 2009 |  |
|  |  |  | HotMix Asphalt-Density Testing of Longitudinal Noints <br> HotMix Asphalt= Drop-Offs <br> Hot-Mix Asphalt-Plant Test Frequency <br> HotMix Asphalt=QCIQA Acceptance Eriteria | $\begin{aligned} & \text { yan: 1, } 2010 \\ & \text { Jan. } 1,2010 \\ & \text { April } 2008 \\ & \text { Jan.1. } 2010 \end{aligned}$ | Jan. 1:2010 |
| - 8010912 |  | X | Hot-Mix Asphalt - Transportation | April 1, 2008 |  |
|  |  |  | Impact Attenuators | Nov. 1, 2003 | Nov. 1, 2008 |
| 80110 |  |  | Impact Attenuators, Temporary | Nov. 1, 2003 | Jan. 1,2007 |
| 1tere 80252 |  | S |  | Jan 1, 2010 | Skuk Mr Matur |
| $\begin{aligned} & 80230 \\ & 80196 \\ & 80045 \\ & 80203 \end{aligned}$ | 125 | X | Liquidated Damages | April 1, 2009 |  |
|  |  |  | Mast Arm Assembly and Pole | Jan. 1, 2008 | Jan. 1, 2009 |
|  |  |  | Material Transfer Device | June 15, 1999 | Jan. 1, 2009 |
|  | 126 | X | Metal Hardware Cast into Concrete | April 1, 2008 | April 1, 2009 |
| 4mix ${ }^{\text {a }}$ |  | \% |  | Nov 1. 2006 | Wan 1r 2010 |
| 80238 | 127 | X | Monthly Employment Report | April 1, 2009 |  |


| $\text { File Name } P \text { Pg }$ | Special Provision Title |  | Effective | Revised |
| :---: | :---: | :---: | :---: | :---: |
|  | － |  | and 1.2010 | 3Smbumbum |
| 80082 |  | Multilane Pavement Patching | Nov．1， 2002 |  |
| 80180129 | X | National Pollutant Discharge Elimination System／Erosion and Sediment Control Deficiency Deduction | April 1， 2007 | Nov．1， 2009 |
| 80208 |  | Nighttime Work Zone Lighting | Nov．1， 2008 |  |
| 80182 |  | Notification of Reduced Width | April 1， 2007 |  |
| If 80069 | 4， |  | Nov， 1,2001 Masan．112010 |  |
| 80216 |  | Partial Exit Ramp Closure for Freeway／Expressway | Jan．1， 2009 |  |
| 80231131 | X | Pavement Marking Removal | April 1， 2009 |  |
| 14 80254 132 | X |  |  |  |
| 80022133 | X | Payments to Subcontractors | June 1， 2000 | Jan．1， 2006 |
| 80209135 | X | Personal Protective Equipment | Nov．1， 2008 |  |
| 80232 |  | Pipe Culverts | April 1， 2009 |  |
| 80119 |  | Polyurea Pavement Marking | April 1， 2004 | Jan．1， 2009 |
| 80210 |  | Portland Cement Concrete Inlay or Overlay | Nov．1， 2008 |  |
| 80170 |  | Portland Cement Concrete Plants | Jan．1， 2007 |  |
| 80217 |  | Post Clips for Extruded Aluminum Signs | Jan．1， 2009 |  |
| 80171136 | X | Precast Handling Holes | Jan．1， 2007 |  |
| 80218 |  | Preventive Maintenance－Bituminous Surface Treatment | Jan．1， 2009 | April 1， 2009 |
| 80219 |  | Preventive Maintenance－Cape Seal | Jan．1， 2009 | April 1， 2009 |
| 80220 |  | Preventive Maintenance－Micro－Surfacing | Jan．1， 2009 |  |
| 80221 |  | Preventive Maintenance－Slurry Seal | Jan．1， 2009 |  |
| 80211 |  | Prismatic Curb Reflectors | Nov．1， 2008 |  |
| 80015 |  | Public Convenience and Safety | Jan．1， 2000 |  |
| 34261 |  | Railroad Protective Liability Insurance | Dec．1， 1986 | Jan．1， 2006 |
| 80157 |  | Railroad Protective Liability Insurance（5 and 10） | Jan．1， 2006 |  |
| 80247 |  | Raised Reflective Pavement Markers | Nov．1， 2009 |  |
| 80223 |  | Ramp Closure for Freeway／Expressway | Jan．1， 2009 |  |
| x +80172 L 138 | X | Reclumed Asphalt Pavement（RAP）wimmex mak | Wan 11．2007： | Sant192010 |
| 80183146 | X | Reflective Sheeting on Channelizing Devices | April 1， 2007 | Nov．1， 2008 |
| 80206147 | X | Reinforcement Bars－Storage and Protection | Aug．1， 2008 | April 1， 2009 |
| 80224 |  | Restoring Bridge Approach Pavements Using High－Density Foam | Jan．1， 2009 |  |
| 雲析80131 | ， |  | Tuly 1.2004 | Sanw192010 |
| 80152 |  | Self－Consolidating Concrete for Cast－In－Place Construction | Nov．1， 2005 | Jan．1， 2009 |
| 80132148 | X | Self－Consolidating Concrete for Precast Products | July 1， 2004 | Jan．1， 2007 |
| 80127 |  | Steel Cost Adjustment | April 2， 2004 | April 1， 2009 |
|  | \％ | StoneMatrix Aspaltemutw | San：1， 2010 | U Smxembe |
| 80234150 | X | Storm Sewers | April 1， 2009 |  |
| 80143157 | X | Subcontractor Mobilization Payments | April 2， 2005 |  |
| 80075 |  | Surface Testing of Pavements | April 1， 2002 | Jan．1， 2007 |
| $\text { 新 } 80087{ }^{158}$ | $5$ | Temporary Erosion Confrol Temporary Longitudinal IrafficBarrier System | $\begin{aligned} & \text { Nov.1, } 2002 \\ & \text { Jan. } 2010 \end{aligned}$ | Uan 142010 |
| 80225 |  | Temporary Raised Pavement Marker | Jan．1， 2009 |  |
| 80176160 | X | Thermoplastic Pavement Markings | Jan．1， 2007 |  |
| F＋1 880257 \％ | 世要䜌 |  | Wan．1．2010 | Whawakemum |
| 20338162 | X | Training Special Provisions | Oct．15， 1975 |  |
|  | \％ |  | Janu1．2010 |  |
| 80071 |  | Working Days | Jan．1， 2002 |  |

The following special provisions are in the 2010 Supplemental Specifications and Recurring Special Provisions:

| File Name | Special Provision Title | New Location | Effective | Revised |
| :---: | :---: | :---: | :---: | :---: |
| 80193 | Concrete Barrier | Section 637 | Jan. 1, 2008 |  |
| 80175 | Epoxy Pavement Markings | Section 1095 | Jan. 1, 2007 |  |
| 80181 | Hot-Mix Asphalt -- Field Voids in the Mineral Aggregate | Section 1030 | April 1, 2007 | April 1, 2008 |
| 80136 | Hot-Mix Asphalt Mixture IL-4.75 | Sections 406, 1003, 1030, 1032 and 1102 | Nov. 1, 2004 | Jan. 1, 2008 |
| 80195 | Hot-Mix Asphalt Mixture IL-9.5L | Sections 1004 and 1030 | Jan. 1, 2008 |  |
| 80129 | Notched Wedge Longitudinal Joint | Section 406 | July 1, 2004 | Jan. 1, 2007 |
| 80235 | Payrolls and Payroll Records | Check Sheets \#1 and \#5 | Mar. 1, 2009 | July 1, 2009 |
| 80134 | Plastic Blockouts for Guardrail | Section 630 | Nov. 1, 2004 | Jan. 1, 2007 |
| 80151 | Reinforcement Bars | Section 1006 | Nov. 1, 2005 | April 1, 2009 |
| 80184 | Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs | Sections 1090, 1091, 1092 and 1093 | April 1, 2007 |  |
| 80212 | Sign Panels and Sign Panel Overlays | Supplemental | Nov. 1, 2008 |  |
| 80197 | Silt Filter Fence | Sections 1080 and 1081 | Jan. 1, 2008 |  |
| 80153 | Steel Plate Beam Guardrail | Section 1006 | Nov. 1, 2005 | Aug. 1, 2007 |
| 80191 | Stone Gradation Testing | Section 1005 | Nov. 1, 2007 |  |
| 80185 | Type ZZ Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs | $\begin{aligned} & \text { Sections 1090, 1091, } 1092 \text { and } \\ & 1093 \end{aligned}$ | April 1, 2007 |  |
| 80149 | Variable Spaced Tining | Section 420 | Aug. 1, 2005 | Jan. 1, 2007 |
| 80204 | Woven Wire Fence | Section 1006 | April 1, 2008 |  |

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

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days


## 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 invitations of bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the check sheet included herein which apply to and govern the construction of Section 05-00121-$00-\mathrm{PV}$ Project ARA-HPP-4097(005) in the City of Jacksonville, and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

DESCRIPTION OF WORK: This contract shall consist of removing existing pavements, curb and gutter, sidewalk, and medians and constructing new concrete curb and gutter roadways with hot-mix asphalt base course and hot-mix asphalt binder/surface, storm sewer, water main, concrete sidewalk, landscape/streetscape, lighting, and other related work on Mauvaisterre, Sandy, Court, Morgan and State Streets that collectively form the Jacksonville Downtown Central Park Plaza.

COMPLETION DATE: All work required in this contract shall be completed by December 15, 2010. Ten (10) additional working days will be allowed after December 15,2010 for completion of landscaping, final striping, and clean-up. In addition to the final completion date, the following completion dates shall also apply.

- June 15, 2010 for completing Pre-Stage 1. This work includes completion of all watermains, basement vaults, and pavement/sidewalk patching as detailed in the Traffic Control Plan for Pre-Stage 1.
- August 15, 2010 for completing Stage 1. This work includes completion of all construction as detailed in the Traffic Control Plan for Stage 1. The contractor is not required to complete the interior plaza work at the end of Stage 1. All other work shall be completed prior to the Start of Stage 2.
- October 1, 2010 for completing Stage 2. This work includes completion of all construction as detailed in the Traffic Control Plan for Stage 2. With the exception of sodding and landscaping, all interior plaza work shall be completed for Stage 2 prior to the Start of Stage 3.
- December 15, 2010 for completing Stages 3 and 4. This work includes completion of all construction as detailed in the Traffic Control Plan for Stages 3 and 4.

If the contractor fails to complete the required work by the completion date(s) or within the number of additional working days stated herein, he/she shall be liable to the Department for liquidated damages in accordance with Article 108.09 of the Standard Specifications, and any other additional special provision which may be attached herein which supplements Article 108.09, until such time the specified items of each
independent stage of construction are completed. The Contractor will also be liable for additional items of work made necessary by not meeting the completion date(s) or additional working days allowed. Such items include, but are not restricted to pavement patching temporary sidewalk, temporary pavement marking, temporary erosion control, and temporary seeding.
J.U.L.I.E.: The toll free telephone number of Joint Utility Locating information for Excavators is 800-892-0123 or 811.

TRAFFIC CONTROL: Traffic control shall be in accordance with the applicable sections of the standard specifications for road and bridge construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these special provisions, and any special details and Highway Standards contained herein and in the plans.

Special attention is called to Article 107.09 and Sections 701 thru 703 of the Standard Specifications for Road and Bridge Construction and the following Highway Standards.

701501
701601
701801
701901
BLR21
BLR22
The contractor shall be responsible for the traffic control devices at all times during construction activities, and shall coordinate the items of work to keep traffic hazards and/or inconveniences to a minimum.

Sign posts shall be $100 \times 100 \mathrm{~mm}(4 \times 4 \mathrm{in}$.) wood posts according to Article 1007.05. All posts shall be braced to the satisfaction of the Engineer. The use of metal posts will not be permitted.

Type III barricades and advance warning signs shall be erected at each end of the section to safeguard the public, while warning signs shall be erected notifying traffic of construction of this project. All barricades and signs required shall be furnished by the Contractor. The Type III Barricades at the Road closure shall be equipped with two type A warning lights.

The Contractor shall allow access to private property along the closed portions of the road or sidewalk where no other public way provides access. Open holes, trenches and drop offs shall be fenced and barricaded to protect local traffic and pedestrians. Flagger(s) will be required when work encroaches on the open lane(s).

Traffic control and protection shall be in accordance with the standards, details and special provisions in the plans and shall be paid for at the contract lump sum price for TRAFFIC CONTROL COMPLETE, which price shall be payment in full for all materials,
labor and equipment required to complete this item as specified and to the satisfaction of the Engineer.

SEQUENCE OF CONSTRUCTION: Because this project involves construction/reconstruction of roadways and sidewalks immediately adjacent to building entrances in the Downtown Business District, it is important for the contractor to adhere to the proposed staging plans and specifications contained herein to avoid disruption of access to the businesses. The contractor shall complete his/her work as dictated in this sequence or directed by the Engineer.

## Pre-Stage I Construction

1. The contractor shall take particular care to minimize disruption to access of abutting properties at all times.
2. Construct proposed watermain improvements and fill basement vaults along Sandy and Mauvaisterre Streets using traffic control and protection standard 701601 for closure of outside lane adjacent to sidewalk.
3. Construct proposed watermain improvements and fill basement vaults along proposed Morgan and Court Streets under existing traffic conditions.
4. Construct proposed watermain improvements at paved intersections using traffic control and protection Standard BLR 22 and advance signing as directed by the Engineer. The roadway shall be open to traffic at the end of each work day.
5. Erect construction fencing and traffic control items as indicated on Traffic Control Plan-Stage 1.

## Stage 1 Construction

1. Remove existing sidewalk, trees, etc. and construct proposed plaza improvements.
2. Remove existing items and construct proposed Morgan and Court Streets maintaining access to adjacent properties at all times.
3. Remove construction fencing, install temporary striping and reconfigure traffic control items as indicated on Traffic Control Plan - Stage 2.

## Stage 2 Construction

1. Open one lane of Court and Morgan Streets to allow thru movements as well as access to new parking. Maintain two existing lanes of thru traffic on Sandy and Mauvaisterre Streets.
2. Complete proposed inner plaza improvements.
3. Remove existing median and construct pavement patch on Mauvaisterre and Sandy Streets.
4. Remove items as indicated and construct improvements for Mauvaisterre and Sandy Streets adjacent to the plaza.
5. Install temporary striping and reconfigure traffic control items as indicated on Traffic Control Plan - Stage 3.

## Stage 3 Construction

1. Open two lanes of traffic around plaza for thru movements as well as access to new parking. Maintain one lane access to and from plaza from all intersection side streets.
2. Remove items as indicated and construct improvements for Mauvaisterre and Sandy Streets adjacent to properties around the outside of the plaza.
3. The Contractor shall take particular care to minimize disruption to access of abutting properties at all times.
4. Install temporary striping in accordance with the striping plans and allow full access to the plaza.

## Stage 4 Construction

1. Adjust utility manhole and valve boxes, mill and surface in half widths using appropriate traffic control standards as directed by the Engineer.
2. Construct final paving striping using appropriate traffic control standards as directed by the Engineer.

EXISTING MONUMENTS, MARKERS AND STONES: This work shall include the safe removal, transportation, and off loading of existing monuments, markers and stones to a site designated by the City of Jacksonville. Removal of existing supporting bases or platforms shall also be removed and disposed of in accordance with Section 202 of the Standard Specifications.

This work shall also include the loading, delivery, and placement of the existing monuments, markers, and stones in Central Park Plaza as shown in the plans and as directed by the Engineer after completion of the Plaza Improvements. Prior to final placement, the Contractor shall install a base as used in the original construction in accordance with the applicable portions of the Standard Specifications and as directed by the Engineer.

This work in its entirety shall not be paid for separately, but considered included in the cost of EARTH EXCAVATION and includes all material, labor, or equipment necessary to complete the work to the satisfaction of the Engineer.

COARSE AGGREGATE: The work for constructing aggregate base, sub-base, surface and shoulders shall be done in accordance with their respective sections of the Standard Specifications. The aggregate shall conform to Article 1004.04 of the Standard Specifications for Road and Bridge Construction, except that the following shall apply.

1. Revise the maximum allowable percentage of weighted average loss when the material is subjected to the 5 cycles of the Sodium Sulfate Soundness Test from 25\% as shown under Class D Quality chart in Article 1004.01(b) of the Standard Specification to $40 \%$.
2. Revise the maximum allowable percentage of wear as determined by the I.A. Abrasion method from 45\% as shown under Class D Quality chart in Article 1004.01(b) of the Standard Specification to $50 \%$.
3. The sum of the percentage of weighted average loss when the material is subjected to 5 cycles of the Sodium Sulfate Soundness Test; and the percentage of wear as determined by the L.A. Abrasion method, shall not exceed $80 \%$.

STORM SEWER (WATER MAIN REQUIREMENTS): This work shall consist of constructing a storm sewer to meet water main standards, as required by the IEPA requirements or when otherwise specified. The work shall be performed in accordance with applicable parts of Section 550 of the Standard Specifications, applicable sections of the current edition of the IEPA Regulations ( 35 III . Adm. Code 653.119), the applicable sections of the current edition of the Standard Specifications for Water and Sewer Main Construction in Illinois, and as herein specified.

This provision shall govern the installation of all storm sewers which do not meet IEPA criteria for separation distance between storm sewers and water mains. Separation criteria for storm sewers placed adjacent to water mains and water services are as follows:

1. Water mains and water service lines shall be located at least 3.05 meters ( 10 ft ) horizontally from any existing or proposed drain, storm sewer, or sewer service connection.
2. Water mains and water service lines may be located closer than 3.05 meters ( 10 ft.) to a sewer line when:
A. Local conditions prevent a lateral separation of 3.05 meters ( 10 ft .), and
B. The water main or water service invert is 460 millimeters (18 in.) above the crown of the sewer, and
C. The water main or water service is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
3. A water main or water service shall be separated from a sewer so that its invert is a minimum of 460 millimeters ( 18 in .) above the crown of the drain or sewer whenever water mains or services cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main or water services located 3.05 meters ( 10 ft .) horizontally of any sewer or drain crossed.

When it is impossible to meet 1,2 , and 3 above, the storm sewer shall be constructed of concrete pressure pipe, slip-on or mechanical joint ductile iron pipe, or PVC pipe equivalent to water main standards of construction. Construction shall extend on each side of the crossing until the perpendicular distance from the water main or water service to the sewer or drain line is at least 3.05 meters ( 10 ft .). Storm sewer meeting water main requirements shall be constructed of the following pipe materials:

## Concrete Pressure Pipe

Concrete pressure pipe shall conform to the latest AWWA Standard C300, C301, C302, or C303.

Joints shall conform to Article 41-2.07B of the "Standard Specifications for Water and Sewer Main Construction in Illinois."

## Ductile Iron Pipe

Ductile-iron pipe shall conform to ANSI A 21.51 (AWWA C151), class or thickness designed per ANSI A 21.50 (AWWA C150), tar (seal) coated and/or cement lined per ANSI A 21.4 (AWWNA C104), with a mechanical or rubber ring (slip seal or push on) joints.

Joints for ductile iron pipe shall be in accordance with the following applicable specifications.

1. Mechanical Joints - AWWA C111 and C600
2. Push-On Joints - AWWA C111 and C600

## Plastic Pipe

Plastic pipe shall be marked with the manufacturer's name (or trademark); ASTM or AWWA specification; Schedule Number, Dimension Ration (DR) Number or Standard Dimension Ration (SDR) Number; and Cell Class. The pipe and fittings shall also meet NSF Standard 14, and bear the NSF seal of approval. Fittings shall be compatible with the type of pipe used. The plastic pipe options shall be in accordance with the following:

1. Polyvinyl Chloride (PVC) conforming to ASTM D 1785. Schedule 80 is required for all pipe sizes, except when the pipe is to be threaded, and then it shall be Schedule 120. It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
2. Polyvinyl Chloride (PVC) conforming to ASTM D 2241. SDR 26 or less is required for all pipe sizes. It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
3. Chlorinated Polyvinyl Chloride (CPVC) conforming to ASTM F 441. Schedule 80 is required for all pipe sizes. Threaded joints are not allowed. It shall be made from CPVC compound meeting ASTM D 1784, Class 23447.
4. Chlorinated Polyvinyl Chloride (CPVC) conforming to ASTM F 442. SDR 26 or less is required for all pipe sizes. It shall be made from CPVC compound meeting ASTM D 1484, Class 23447.
5. Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C900. DR 25 or less is required for all pipe sizes. It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
6. Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C905. DR 26 or less is required for all pipe sizes. It shall be made from PVC compound meeting ASTM D 1784, Class 12454.

Joining of plastic pipe shall be by push-on joint, solvent welded joint, heated welded joint, flanged joint, or threaded joint, in accordance with the pipe manufacturer's instructions and industry standards. Special precautions shall be taken to insure clean, dry contact surfaces when making solvent or heat welded joints. Adequate setting time shall be allowed for maximum strength.

Elastomeric seals (gaskets) used for push-on joints on plastic pipes shall comply with ASTM F 447.

Solvent cement shall be specific for the plastic pipe material and shall comply with ASTM D 2564 (PVC) or ASTM F 493 (CPVC) and be approved by NSF.

For water-sewer crossings only, storm sewer meeting water main requirements may also be constructed of reinforced concrete sewer pipe. The sewer pipe shall conform to ASTM C 76 with a rubber gasket meeting ASTM C 443. The pipe class shall meet the requirements of Section 550 of the Standard Specifications for Road and Bridge Construction.

This work will be measured and paid for at the contract unit price per foot (meter) for STORM SEWER (WATER MAIN REQUIREMENTS) of the diameter specified.

VALVE BOXES AND DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED: This work shall consist of adjusting valve boxes and domestic water service boxes so the top of the box is flush with the finished grade in accordance with the applicable portions of Section 565 and 602 of the Standard Specifications and as directed by the Engineer.

Basis of Payment: This work will be paid for at the contract unit price each for VALVE BOXES TO BE ADJUSTED, or DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED, which price will be payment in full for all excavation; furnishing all materials; backfilling, including fine aggregate, and disposal of surplus material.

PAVEMENT REMOVAL OVER EXISTING WATER MAINS: At pavement removal locations over existing water mains, pavement breaking using impact equipment will not be permitted. This restriction will apply to pavement being removed within 10 feet of a water main location. The method of removal will be approved by the Engineer and will be included in the unit cost of the removal pay item.

ADJUSTING WATER MAINS: This work shall consist of lowering and relocating existing water mains in accordance with the detail shown on the plans at locations where existing water mains are in conflict with the proposed storm sewer or other construction.

All materials, construction methods, pressure testing, and disinfection of water mains shall conform with Section 561 of the Standard Specifications.

Basis of Payment: This work will be paid for at the contract unit price per foot for ADJUSTING WATER MAIN, of the size shown, measured in place. This price shall include all material, labor and equipment necessary and shall include the cost of trench backfill, hydrostatic tests and disinfecting the water main.

PRESERVING PROPERTY MARKERS: The existing property corner markers located along this section shall be protected by the Contractor. Any such monuments destroyed by the Contractor's operation shall be replaced by a Registered Land Surveyor at no additional cost to the Department.

Any expense, inconveniences, or delays caused the Contractor in complying with this Special Provision will be considered as incidental to the contract and no additional compensation will be allowed.

FIRE HYDRANTS TO BE ADJUSTED: All existing fire hydrants within the project limits that do not conform to the new ground line shall be adjusted in such a manner that the hydrants conform to the new ground line and are left in good condition. This work shall be done as directed by the Engineer.

Any fire hydrants damaged by the Contractor shall be repaired, or replaced, at his expense.

Basis of Payment: This work shall be paid for at the contract unit price per each for FIRE HYDRANTS TO BE ADJUSTED, which price shall include all labor, equipment, and materials, including pipe, fine aggregate, and reaction blocking required to complete this item as specified, and to the satisfaction of the Engineer.

STATUS OF UTILITIES TO BE ADJUSTED

| Name and Address <br> Of Utility | Type | Location | Estimated Date <br> Relocation <br> Completed |
| :--- | :---: | :--- | :--- |
| City of Jacksonville <br> 200 W. Douglas <br> Jacksonville, IL 62650 | Water \& Sewer | Throughout <br> Project | During Construction |
| Illinois Power Co. <br> Jacksonville, IL 62650 | Electric <br> (Aerial) <br> Gas <br> (Buried) | Throughout <br> Project | During Construction |
| Verizon <br> 330 W. Beecher <br> Jacksonville, IL 62650 | Telephone | Throughout <br> Project | During Construction |
| Mediacom <br> 409 Massey Lane <br> Jacksonville, IL 62650 | Cable TV | Throughout <br> Project | During Construction |

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Articles 105.07 and 107.20 of the Standard Specifications for Road and Bridge Construction shall apply.

If any utility adjustment or removal has not been completed when required by the contractor's operations, the contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the contractor's operations were affected.

REMOVING INLETS: This work shall consist of removing inlets at the locations shown on the plans in accordance with the applicable portions of Section 605 of the Standard Specifications.

At locations designated by the Engineer the flow in the existing storm sewer system shall be maintained through the area where the inlet is to be removed. The work of removing existing inlets where flow is to be maintained shall be in accordance with Article 605.03 of the Standard Specifications.

CONNECTING EXISTING STORM SEWERS TO PROPOSED STORM SEWERS: The existing storm sewers shall be connected to the proposed storm sewers at the locations shown on the plans. A portion of the existing pipe shall be removed for the placement of the proposed storm sewers.

This work will not be paid for separately, but will be included in the unit cost per foot for storm sewer of the size and type specified.

ADJUSTING WATER SERVICE LINES: This work shall consist of lowering and relocating water service lines at locations where existing water service lines are in conflict with the proposed storm sewer or other construction.

All materials, construction methods, pressure testing, and disinfection of water service lines shall conform with Section 562 of the Standard Specifications.

Basis of Payment: This work will be paid for at the contract unit price per foot for ADJUSTING WATER SERVICE LINES, regardless of the size encountered, measured in place. This price shall include all material, labor, and equipment necessary and shall include the cost of trench backfill.

COMBINATION CURB AND GUTTER REMOVAL: This work shall consist of removing concrete curb and gutter, concrete curb and stone curb at locations indicated on the plans and as directed by the Engineer and in accordance with the applicable portions of Section 440 of the Standard Specifications.

Basis of Payment: This work shall be paid for at the contract unit price per foot for COMBINATION CURB AND GUTTER REMOVAL in accordance with Article 440.08 of the Standard Specifications.

SAWCUTTING PAVEMENT, SIDEWALK, CURB AND COMBINATION CURB AND GUTTER: Prior to removal of any of the above items, the joint between that portion to remain and that portion to be removed shall be neatly sawed to obtain a vertical edge.

This work shall not be paid for separately, but considered included in the cost of the item being removed.

HAND GRADING: Grading shall be done by hand around light poles, utility poles, sign posts, shrubs, trees or other natural or man-made objects where shallow fills or cuts are adjacent to the items. The decision as to items to remain in place shall be as directed by the Engineer.

This work will not be paid for separately, but shall be considered included in the cost per cubic yard for Earth Excavation and no additional compensation will be allowed.

PRIMING OPERATIONS WITHIN THE BUSINESS DISTRICT: Care shall be taken by the Contractor during priming within the limits of this section. Consideration shall be given by the Contractor for manners of performing priming operations in these areas to minimize tracking of the prime coat by pedestrian traffic into adjacent businesses.

The Contractor shall use emulsion prime coat, prime before store hours, prime after store hours, gap prime at pedestrian crossings, prime just far enough ahead of his asphalt laydown operation to assure that the prime coat breaks or prime on weekends when businesses are closed. Care shall also be used in these areas not to prime more area than can be overlaid in one day's operation.

Any inconveniences incurred by the Contractor in complying with this Special Provision will be considered included in the cost per gallon for BITUMINOUS MATERIALS (PRIME COAT) and no additional compensation will be allowed.

## CONCRETE MEDIAN SURFACE REMOVAL:

This work shall consist of the removal and satisfactory disposal of all existing concrete median surfaces at the locations shown in the plans or determined by the Engineer. The work shall be done in accordance with Article 440.03 of the Standard Specifications.

This work will be paid for at the contract unit price per square foot for CONCRETE MEDIAN SURFACE REMOVAL and no additional compensation will be allowed.

## STORM SEWERS TO BE CLEANED:

This work shall consist of cleaning the existing storm sewers at the locations shown on the plans of all silt and other debris which interfere with the flow through the storm sewers.

This work will be paid for at the contract unit price per foot for STORM SEWERS TO BE CLEANED which price will include all labor and equipment required to complete this work, including the disposal of the removed materials, to the satisfaction of the Engineer.

BASEMENT VAULTS: At locations where vaults exist under existing sidewalk which is to be replaced, the existing sidewalk shall be removed, all openings in the wall at the building line shall be sealed closed with a concrete retaining wall, the vault filled with trench backfill, and new sidewalk then constructed.

Details of Construction. This sidewalk to be removed may consist of plain concrete sidewalk or reinforced concrete sidewalk. The sidewalk removal at the building lines shall be in accordance with the details shown in the plans and as directed by the Engineer. The Contractor shall take care not to damage store fronts, bearing walls, supporting beams, or any other supporting members vital to the structural support of the building or the aesthetic value of the façade of the building.

All openings in the bearing wall at the building line shall be closed by constructing a concrete retaining wall adjacent to the opening in accordance with the detail shown in the plans, and the applicable portions of Section 503 of the Standard Specifications. The wall shall be formed and constructed in such a manner so that no additional pressures are exerted on the bearing wall. Steel forms with metal snap ties will be
permissible. After the forms have been removed, the wall shall be temporarily braced to prevent tipping toward the street until the vault is backfilled.

All loose material in partition walls and the retaining wall at the street line shall be removed and disposed of prior to filling the vault. All voids under the pavement shall be filled with compacted trench backfill. Concrete floors in the vaults shall be broken for drainage purposes. The vault shall then be filled with trench backfill to the subgrade elevation of the proposed sidewalk.

The P.C.C. sidewalk shall be constructed to the lines and grades determined by the Engineer at the time of construction, in accordance with the details shown in the plans and in accordance with the applicable portions of Section 424 of the Standard Specifications. The joint at the building line shall be sealed in accordance with the details shown in the plans.

Any damage to bearing walls or buildings caused due to the Contractor's operations, shall be replaced or repaired by the Contractor at no additional cost to the Department.

Disposal of Materials. All excavation for the retaining wall, broken concrete, bricks, or other debris removed form the vaults shall be disposed of outside the limits of the right of way at locations approved by the Engineer.

Frames and grates removed with existing sidewalk and not to be incorporated into the improvement shall become the property of the City of Jacksonville. The frames and grates shall be stockpiled at a location designated by the Contractor for removal by City forces.

Basis of Payment. Sidewalk removed shall be paid for at the contract unit price per square foot, measured in place, for SIDEWALK REMOVAL, which price includes payment in full for the removal and disposal of all concrete or reinforced concrete sidewalk. The concrete retaining wall shall be paid for at the contract unit price per square foot of surface area, measured from the top of the footing to the top of the wall, for CONCRETE RETAINING WALL, which price shall include all Class SI Concrete, reinforcement bars, excavation, concrete, and reinforcement bars, for footings, forming and bracing the wall, and all other material and labor required to complete the wall. Trench backfill shall be paid for at the contract unit price per cubic yard for TRENCH BACKFILL, which price shall include all labor, material, and equipment required to complete this item. The proposed sidewalk shall be paid for at the contract unit price per square foot for PORTLAND CEMENT CONCRETE SIDEWALK, 4 INCH, measured in place, which price includes payment in full for all material, labor, equipment, joints, etc. required to complete this item.

The removal and disposal of all debris removed from the vaults will not be paid for separately, but shall be included in the cost of the concrete retaining wall and backfill.

STRINGLINE: Some or all of the milling and/or binder on this section is intended as the first step toward establishing the proposed profile grade. In these locations which are shown in the plans, the milling and binder will be controlled by stringline(s) erected, maintained and removed and disposed of by the Contractor.

The cost of providing, erecting, maintaining, removing, disposing of and employing the stringline as the grade control will not be paid for separately, but shall be considered as included in the pay item involved.

HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH: This work shall consist of the partial removal of the hot-mix asphalt surfacing of the existing pavement at the locations shown on the plans.

This work shall be performed in accordance with the Special Provision for Stringline and Section 440 of the Standard Specifications.

This work will be paid for at the contract unit price per square yard for HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH, which price shall include all labor and equipment, including stringline, necessary to complete the work to the satisfaction of the Engineer.

WATER DISTRIBUTION SYSTEM: This item shall consist of furnishing and installing water main, water services, fire hydrants, fittings, valves, valve boxes, line stops, and other appurtenances necessary to complete the work; said water main and appurtenances being of the type, classes, sizes and dimensions required on the plans; all items being furnished and installed at the places designated on the plans or by the Engineer, in accordance with these specifications and the plans.

This item shall include in the bid price per linear foot of water main in place, the cost of common excavation and trench backfill, the cost of furnishing and installing all trench bracing, all fittings required to complete the water main as shown on the plans, and the material for and the making of all joints including all connections to existing mains.

This work shall be performed in accordance with and the materials shall comply with the applicable portions of the Standard Specifications for Water and Sewer Main Construction in Illinois, Fifth Edition, dated May, 1996 and the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, dated January 1, 2007.

## MATERIALS

GENERAL; The Contractor shall provide all materials required to construct a potable water main with fire hydrants, valves and fittings, valve boxes, thrust blocking, line stops, disinfecting and testing materials meeting regulatory requirements in accordance with:

1. Illinois Environmental Protection Agency:
a. Technical Policy Statements, Nov. 1, 1985.
b. "Recommended Standards for Water Works," 2003 Edition.
2. American Water Works Association (AWWA):
a. Cement Mortar Lining for Ductile Iron and Gray Iron Pipe and Fittings for Water (ANSI/AWWA C104/A21.4-90).
b. Rubber Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings (ANSI/AWWA C111/A21.11.90).
c. Standard for Disinfecting Water Mains (ANSI/AWWA C651-92).
d. Installation of Gray and Ductile Cast Iron Water Mains and Appurtenances (ANSI/AWWA C600-87).
e. Resilient Seated Gate Valves 3" through 12" NPS for Water and Sewage Systems (ANSI/AWWA C509-87).
f. Dry Barrel Fire Hydrants (ANSI/AWWA C502-85).
g. Ductile Iron and Gray-Iron fittings, 3 in. through 48 in. for water and other liquids (ANSI/AWWA C110/A21.10-93).
3. Specifications for Polyvinyl Chloride (PVC) Plastic Pipe (SDR-PR and Class T) (ASTM D2241).
4. Underground Installation of Thermoplastic Pressure Piping (ASTM D2774-72).
5. "Standard Specifications for Water and Sewer Main Construction in Illinois," Fifth Edition, dated May, 1996.
6. American Water Works Association ANSI/AWWA C900-89, Polyvinyl Chloride (PVC) Pressure Pipe, 4 in. through 12 in. for Water Distribution.

The Contractor shall transport, deliver, unload, store and handle all materials in a manner to prevent damage to the materials or the work. All damaged, broken or otherwise defective materials will be rejected. Store all circular rubber gaskets and special lubricants in packaged materials with the manufacturer's name, brand and all other applicable data plainly marked thereon.

PVC WATER MAIN PIPE: Pressure polyvinyl chloride pipe (PVC) of the size shown on the drawings shall be made from clear, virgin, Type 1, Grade 1 resin conforming to the latest revision of ASTM D1784. It shall be bell and spigot using a rubber gasket in accordance with ASTM F477 and be suitable for use at maximum hydrostatic working pressure of 150 psi at 73 degrees $F$. All pipe shall meet the requirements set forth in AWWA C900 with Dimension Ratio of DR18 and bear the National Sanitation Foundation seal for potable water. Fittings for PVC water main shall be cast iron bolted mechanical joint with retainer glands in accordance with AWWA C110/ANSI A21.10. Compact filling conforming to ANSI/AWWA C153/A21.53-88 are acceptable. Fittings shall not be paid for separately, but considered included in the cost of the water main of the size specified.

FIRE HYDRANT COMPLETE: Fire hydrants shall be dry barrel with a flangible section near the ground line designed to break on impact. The fire hydrant shall be in accordance with AWWA C502. Fire hydrants shall have a 6 -inch mechanical joint inlet connection. Two 2-1/2 inch hose nozzles and one $6^{\prime \prime}$ pumper nozzle shall be fitted with cast iron threaded caps with operating nuts of the same design and proportions as the hydrant stem nut. Caps shall be threaded to fit the corresponding nozzles and shall be fitted with suitable gaskets for positive water tightness under test pressures. All hydrants shall include tee, auxiliary 6 -inch gate valve and box as specified below and shall not be paid for separately, but included in the cost of Fire Hydrant Complete. Fire hydrants shall be purchased from the City of Jacksonville Water Department. Joints for the fire hydrants and auxiliary 6 -inch gate valve shall be mechanical with joint in accordance with AWWA A21.11 with retaining glands.

VALVES WITH VALVE BOXES: The minimum requirements for all gate valves shall, in design, material and workmanship, conform to the standards of AWWA C509. All materials used in the manufacturer of waterworks gate valves shall conform to the AWWA standards designed for each material listed.

1. The gate valves shall be standard pattern and shall have the name or mark of the manufacturer, size and working pressure plainly cast in raised letters on the valve body.
2. Valves for underground installation shall be mechanical joint in accordance with AWWA C110/ANSI A21.10, with joints in accordance with AWWA C111/ANSI A21.11 with retainer glands.
3. The valve bodies shall be cast iron, mounted with approved non-corrosive materials. All wearing surfaces shall be bronze or other non-corrosive material, and there shall be no moving bearing or moving contact surfaces, or moving iron in contact with iron.
4. Contact surfaces shall be machined and finished in the best workmanlike manner, and all wearing surfaces shall be easily renewable.
5. Gate valves shall be non-rising stem, resilient wedge style Mueller A-2360 with stainless steel bolts. All valves shall open by turning the operator counterclockwise.

Valve boxes of sufficient length to permit operation of the valves shall be supplied with the valves for underground installation. The cast iron valve box shall be of the extension type, Mueller \#H-10360 with length sufficient to extend from the water main up to the surface of the finished grade, provided with a detachable iron lid at least six inches in diameter. The word "WATER" shall be cast on the lid of each box. Valve boxes shall not be paid for separately, but considered included in the cost of the valve of the size specified.

THRUST BLOCKING: Construct poured concrete thrust blocking at all bends in piping equal to or greater than $11-1 / 4^{\circ}$ and at hydrant locations. The concrete blocking shall be poured against undisturbed earth. Thrust block bearing surface shall be of size as shown on drawings and as directed by the Engineer. Concrete shall be Class SI, in accordance with the applicable requirements of Sections 503 and 1020 of the Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction". The cost to provide thrust blocking shall be considered included in the cost of the contract. Wrap all fittings in 6 mil plastic to act as bond breaker between the concrete and valve or fitting.

DETECTION TAPE: Pipe line detection tape shall be inert, bonded layer plastic with metallic foil core. Tape shall be brightly colored and be imprinted with "CAUTION WATER LINE BELOW". Tape width shall be 2". Tape shall be located a minimum of 2 feet directly above the pipe. The cost to provide detection tape shall be considered included in the cost of the water main.

TRACER WIRE: Provide a \#10 single strand coated copper tracer wire suitable for underground installation over all water mains constructed under this contract.

Wire shall be installed directly with the water main before placing any backfill. Wire shall terminate and begin at ground level within the valve boxes. Care shall be exercised during installation to not kink, twist, smash or otherwise weaken or break the wire. Installation shall be subject to the satisfaction of the Engineer. Before acceptance, the tracer wire installations shall be tested for electrical continuity. The Contractor will be responsible for conducting all tests and repairing or replacing all faulty installations to the satisfaction of the Engineer. The cost to provide tracer wire shall be considered included in the cost of the water main.

WATER SERVICE CONNECTIONS: Water service connections shall consist of a 4 " water service pipe attached to the proposed main using an appropriate tee fitting and thrust blocking. The service shall be extended thru the basement wall of the business and connected to the existing service using the appropriate reducer fitting. A $4^{\prime \prime}$ gate valve with valve box shall be installed immediately after the connection of the service to the main. Trenches shall be backfilled with Trench Backfill.

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All service pipe, valve, valve boxes, and fittings shall be in accordance with PVC WATER MAIN, VALVES AND VALVE BOXES, and THRUST BLOCKING as described herein.

LINESTOPS: Furnish and install linestops for the pipe diameter specified. This work shall be completed, tested and ready for service prior to the installation of water mains or appurtenances. The static pressure at the installation site is approximately 75 psi. Prior to line stop removal, line stops shall be closed to check for installed valve leaks.

## CONSTRUCTION METHODS

GENERAL: The contractor shall provide trenching, excavation, backfilling, compaction, removal of excess excavation, removal of existing watermain and appurtenances as necessary, installation of water main and appurtenances, thrust blocking, disinfecting and testing, cast in place concrete and all other work necessary to complete the installation of the water main. No additional compensation will be allowed due to encounters with buried brick, concrete walls from existing basements/vaults.

TRENCHING, BACKFILLING AND COMPACTION. This work shall be performed and executed as follows:

INSPECTION
A. Examine the area where and conditions under which trenching, backfilling and compacting for utilities are to be performed. Notify Engineer in writing of conditions detrimental to proper and timely completion of the work.

## EXCAVATION OR TRENCH FOR PIPE OR CONDUIT:

A. Excavation shall be made by open cut. The sides of the trench shall be kept as nearly vertical as possible, especially from the trench floor to the level of 12 inches above the top of the pipe. Excavation shall be in accordance with Section 20 of the "Standard Specifications for Water and Sewer Main Construction in Illinois".
B. Trenches shall be excavated to a depth that will provide a covering of not less than $4^{\prime}-6^{\prime \prime}$ or as shown on the drawings, measured from the top of the pipe barrel to the finish grade of the ground. Trench bottoms shall have a minimum width of the pipe plus 12 inches.
C. Provide and maintain such sheeting and bracing to support the sides of the excavation, and to prevent movement which might injure personnel, damage the pipe or delay the work.

## BACKFILL BELOW CENTERLINE OF PIPE OR CONDUIT:

1. Granular cradle and pipe cradle materials shall be in accordance with the details shown on the drawings and in accordance with Sections 20-2.20C of the "Standard Specifications for Water and Sewer Main Construction in Illinois" and in accordance with Section 208 of the "Standard Specifications for Road and Bridge Construction".
2. Granular cradle and pipe cradle shall be placed and compacted in accordance with Sections 20-2.20B of the "Standard Specifications for Water and Sewer Main Construction in Illinois".

## BACKFILL ABOVE CENTERLINE OF PIPE OR CONDUIT:

1. After completion of pressure and leakage tests specified elsewhere, the exposed pipe and joints shall be backfilled by hand, together with tamping, until fill has progressed to a minimum depth of 12 inches above the top of the pipe.
2. Backfill above the centerline of pipe or conduit shall be placed and compacted in accordance with Section 20-2.21B, of the "Standard Specifications for Water and Sewer Main Construction in Illinois" and as specified in paragraph 3 below.
3. Backfilling under existing or proposed roads, parking areas, sidewalks, other improved surfaces or at locations shown on the drawings shall be entirely aggregate for trench backfill as specified in Section 208 of the "Standard Specifications for Road and Bridge Construction.

DISPOSAL OF SURPLUS AND UNDESIRABLE EXCAVATION MATERIAL: All surplus excavated material not required for backfilling the excavation shall be removed and deposited and graded in accordance with Section 202.03 of the "Standard Specifications for Road and Bridge Construction". All undesirable material, including rocks, trees, stumps, etc. shall be removed and deposited in accordance with Section 202.03 of the "Standard Specifications for Road and Bridge Construction".

PAYMENT: Costs for work required by this specification section shall be included in the cost of the pipeline installation and no additional compensation will be allowed.

## INSTALLATION

## COORDINATION:

A. Coordinate installation of water line with all other crafts to alignment, depth and service locations and as shown on the drawings. Damage done to other utilities including, but not limited to telephone, cable, electrical and natural gas shall be addressed as specified in Article 107.31 of the Standard Specifications for Road and Bridge Construction.

## INSTALLATION:

## A. Laying of Pipe

1. All installations shall conform to lines and grade shown on the drawings. Valves and special fittings shall be placed where shown on the drawings unless their location is changed by the Engineer. When field conditions dictate deviation from the drawings, no change shall be made without written authorization of the Engineer.
2. No pipe shall be laid in water or when, in the opinion of the Engineer, trench conditions are unsuitable. When pipe laying is stopped at night or for any other reason, watertight plugs shall be used to exclude dirt, water, small animals and other foreign material from the pipe.
3. Prior to starting work, have the manufacturer furnish instructions in the proper assembly and installation of the pipe. Such instructions shall in no way be construed to assume all or any part of the Contractor's responsibility for proper installation.
4. All pipe, fittings and accessories shall be carefully placed into the trench by suitable equipment in such manner to prevent damage to pipe and fittings. A granular cradle shall extend completely around all ductile iron fittings to help prevent corrosion.
5. In distributing the material at the site of the work, each piece shall be unloaded opposite or near the place where it is to be laid in the trench. All pipe shall be loaded and unloaded piece-meal by hand or in bundles by lifting with hoists or skidding so as to avoid shock or damage. Under no circumstances shall pipe materials be dropped. Pipe handled on skidways shall not be skidded or rolled against pipe already on the ground.
6. Bedding and backfilling shall be as specified previously.
7. Before any length of pipe is placed in the trench, a careful inspection shall be made of the interior of the pipe to see that no foreign material is in the pipe. In order to properly remove all foreign material, swab of necessary length shall be available at all times.
8. All pipe shall be lowered carefully into the trench, properly aligned, and properly jointed by use of suitable tools and equipment, in a manner to prevent damage to pipe materials and protective coatings and linings.
9. Under no circumstances shall pipe materials or fittings be dropped or dumped into the trench. The pipe and fittings shall also be inspected to determine if they are sound and free from cracks. Laying of pipe shall be commenced immediately after excavation is started.
10. Pipe shall be laid with bell ends facing in the direction of laying, unless the main is being laid down a steep incline, in which case the bell ends shall face uphill.
11. All lumps, blisters and excess coating shall be removed from the joint of each pipe; and the outside and inside of all joints shall be wire brushed and wiped clean and dry and free from oil and grease before the pipe is laid.
12. Avoid field cutting of pipe if at all possible. When pipe is to be cut in the field, the cut end shall be conditioned so that it can be used to make up the next joint. Bevel the outside of the cut $3 / 16$ inch to $1 / 4$ inch at an angle of approximately 30 degrees to prevent damage to the gasket.
B. Jointing:
13. Remove all foreign matter from the socket, making sure the gasket seat is clean.
14. The gasket shall be wiped clean with a clean cloth, flexed and properly placed in the socket for a snug fit in the retainer seat.
15. Apply lubricant furnished by the pipe manufacturer on the surface of the gasket which will come in contact with the plain end of the pipe to be laid.
16. Clean the plain end of the pipe and apply a thin film of lubricant about one inch wide around the circumference of the pipe. Keep pipe free of ground or trench sides to prevent foreign matter from clinging to the lubricant.
17. The plain end of the pipe shall be aligned and carefully entered into the socket until it just makes contact with the gasket. This is the starting position for the final assembly of the joint.
18. Joint assembly shall then be completed by jacking the plain end of the entering pipe past the gasket (which is thereby compressed) until it makes contact with the bottom of the socket. A system of marking the pipe shall be used to make certain the assembled joint is at the proper depth.
C. Laying of Pipe on Curves:
19. Long radius curves, either horizontal or vertical, may be laid with standard pipe by deflections at the joints. When the pipe is shown curved on the
drawings and no special fittings are shown, the curves can be made by deflection of the joints as shown on the drawings with standard lengths of pipe. Where shorter lengths are required, the drawings will indicate maximum lengths that can be used. No pipes shall be laid on curve without written authorization of the Engineer.
20. When rubber gasketed pipe is laid on a curve, the pipe shall be jointed in a straight alignment and then deflected to the curved alignment. Trenches shall be made wider on curves for this purpose.
D. Valve Boxes and Valves for Underground Installation:
21. The valve boxes shall be set in position during backfilling operations so they will be in a vertical alignment to the gate valve operating stem. The lower casting of the unit shall be installed first in such a manner as to be cushioned and to not rest directly upon the body of the gate valve or upon the water main. The upper casting of the unit shall then be placed in proper alignment and to such an elevation that its top will be final grade.
22. All valve boxes shall be installed flush with sidewalks, drives or finish grade.
23. All gate valves shall be inspected upon delivery in the field to insure proper working order before installation. They shall be set and jointed to the pipe in a manner as set forth in the AWWA Standards for the type of connection ends furnished.
24. Buried valves shall be installed in a vertical position and be provided with a standard valve chamber in a cast iron valve box so arranged that no shock will be transmitted to the valve or strain on pipe joints. The box shall be centered over the operating nut, and the cast iron box cover shall be set flush with the roadbed or finished surface.
E. Hydrants
25. Hydrants shall be installed at the locations shown on the drawings. They shall be plumb and shall be set so that the lowest hose connection is at least 15 inches above the surrounding finish grade. All hydrants shall be inspected in the field upon delivery to the job to insure proper operation before installation. A minimum of $1 / 4$ cubic yard of coarse aggregate shall be placed at and around the base of the hydrant to insure proper drainage of the hydrant after use. The blocking of the hydrant shall conform with the blocking detail shown on the drawings. Care shall be taken to insure that weep holes are not covered by concrete blocking to insure a firm bearing for the hydrant base.

## F. Thrust Blocking

1. Where any section of water line is provided with concrete reaction blocking, the hydrostatic pressure test shall not be made until at least two days have elapsed after the concrete reaction blocking was installed.
G. Installation procedures shall also follow methods as specified in ASTM D-2774 and ANSI/AWWA C600 in combination with the manufacturer's recommendations.

## HORIZONTAL SEPARATION-WATER MAINS AND SEWERS:

A. Water mains shall be located at least ten feet horizontally from any existing or proposed drain, storm sewer, sanitary sewer, combined sewer or sewer service connection.
B. Water mains may be located closer than ten feet to a sewer line when:

1. Local conditions prevent a lateral separation of ten feet; and
2. The water main invert is at least 18 inches above the crown of the sewer; and
3. The watermain is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
C. When it is impossible to meet (A) or (B) above, both the watermain and drain or sewer shall be constructed of slip-on or mechanical joint ductile iron pipe or PVC pipe equivalent to water main standards of construction. The drain or sewer shall be pressure tested to the maximum expected surcharge head before backfilling.

## VERTICAL SEPARATION - WATER MAINS AND SEWERS:

A. A water main shall be separated from a sewer so that its invert is a minimum of 18 inches above the crown of the drain or sewer whenever water mains cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main located within ten feet horizontally of any sewer or drain crossed. A length of water main pipe shall be centered over the sewer to be crossed with joints equidistant from the sewer or, drain.
B. Both the water main and sewer shall be constructed of slip-on or mechanical joint ductile iron pipe or PVC pipe equivalent to water main standards of construction when:

1. It is impossible to obtain the proper vertical separation as described in (A) above; or

## 2. The water main passes under a sewer or drain.

C. A vertical separation of 18 inches between the invert of the sewer or drain and the crown on the water main shall be maintained where a water main crosses under a sewer. Support the sewer or drain lines to prevent settling and breaking the water main, as shown on the plans or as directed by the Engineer.
D. Construction shall extend on each side of the crossing until the perpendicular distance from the water main to the sewer or drain line is at least ten feet.

## TESTING:

A. Hydrostatic Test

1. Backfill shall be placed over the pipe except at the joints. The pipe shall be slowly filled with water. Care shall be taken to expel all the air from the pipes. The pipes shall be tapped at high points to vent the air. Pressure at least equal to, or greater than, 90 psi , measured at the point of lowest elevation, shall be applied for not less than two hours; and all pipe, fittings, valves, hydrants and joints shall be carefully examined for defects. Leaking joints shall be remade and then retested. Maximum test pressure shall not exceed 125 psi.
2. No pipe installation shall be accepted unless and until the leakage, determined under the test pressure, is less than that allowed in Section 41-2.13C in the "Standard Specifications for Water and Sewer Main Construction in Illinois".
3. The test shall be made between valves and shall be made within 10 working days of the completion of such sections of lines. To determine the rate of leakage, furnish a suitable pump, pressure gauge and water meter or other appliance for measuring the amount of water pumped: The instruments shall be tested for accuracy as frequently as directed by the Engineer. Contractor shall furnish all the labor and materials to make the tests and to perform all testing work incidental to the Contract.
B. All other water line appurtenances shall be tested at the factory in accordance with the applicable AWWS Standard stated in Section 7602.1 of this special provision. Accept all material upon delivery and insure its proper operation at substantial completion.

## DISINFECTION:

A. Disinfection of valves, hydrants and piping shall be conducted in accordance with the materials and methods specified in AWWA C651. In the process of disinfecting newly laid pipe, all valves or other appurtenances shall be operated while the pipe line is filled with the chlorinating agent.
B. Following disinfection, all chlorinated water shall be thoroughly flushed from the newly laid pipe line at its extremities until the replacement water throughout its length shall, upon test, be proved comparable in quality to the water served the public from the existing water supply system. Bacteriological testing shall be as required by the Illinois Environmental Protection Agency. Two passing tests a minimum of 24 hours apart will be required.
C. Upon completion of testing and disinfection, Contractor shall leave all lines full of water ready for use by the Owner. The cost to disinfect including all water required shall be considered included in the cost of the Contract.

## RESTORATION AND CLEAN-UP:

A. Upon completion of the water distribution system, all excavated areas shall be restored by reseeding, replacement of aggregate base course, and/or pavement replacement as required. All areas will be left in a condition to not restrict drainage. Regrade all ditches and side slopes. Reseeding shall be in accordance with Section 250 of the IDOT Standard Specifications for Road \& Bridge Construction.
B. Upon completion of the work, inspect the entire installation. Correct all defective work. Replace all damaged and defective parts with new materials.
C. Upon completion of installation and at such other times as directed, remove all surplus materials, debris, empty cartons, rubbish, and legally dispose of same off the site.

## PAYMENT:

A. Payment for the installation of pipe, valves, line stops and hydrants shall be at the Contractor Unit Price Bid for the respective items. The Unit Price Bid shall include excavation and trench backfill for the pipeline whether it is by trenching or open cut. All work required for the complete installation, ready for use, of this water distribution system shall be included in the Unit Prices Bid.

CONCRETE THRUST BLOCKING: Handling, proportioning, batching, mixing, testing and placing the cast-in-place concrete for thrust blocking shall be performed in accordance with the applicable requirements of Section 1020 and of the construction requirements of Section 503 of the "Standard Specifications for Road and Bridge Construction". The concrete shall have a minimum compressive strength of 3,500 psi at 14 days.

Basis of Payment: Payment will be made at the contract unit price per linear foot for each kind of water main/service pipe of the type, class and size designated. Payment will also be made for the installation of valves (including valve boxes), linestops, and fire hydrants (including auxiliary valves and valve boxes) of the types and sizes designated at the contract unit price per each for the respective items. Trench backfill will not be paid for separately, but considered included in the cost of the respective item.

These prices shall be full compensation for furnishing all materials required as shown in the plans and for all preparation, assembly, and installation of these materials; and for all testing, disinfecting, cleanup and restoration; and for all labor, equipment, tools, trench backfill and incidentals necessary to complete the installation of this water distribution system, ready for use, and accepted by the Engineer.

Payment will be made at the contract unit price for the following items:

```
WATER MAIN 4 " - per foot
WATER MAIN 6 " - per foot
WATER MAIN 10" - per foot
LINE STOPS 4" - per each
LINE STOPS 6" - per each
LINE STOPS 10" - per each
FIRE HYDRANT COMPLETE - per each
WATER VALVES 4 " - per each
WATER VALVES 6 " - per each
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## WATER VALVES 10" - per each

## WATER SERVICE LINE $4^{\prime \prime}$ - per foot

STAGING OF WATER MAIN HYDROSTATIC TEST: The contractor shall conduct hydrostatic testing of the watermain constructed in Pre-Stage 1 as specified above prior to any construction is initiated in Stage 1 construction. Leaking joints shall be repaired and re-tested prior to conducting paving patching operations.

Costs for work required by this special provision will not be paid for separately, but shall be considered included in the cost of the water distribution system pay items involved.

PAVEMENT PATCHING: This work shall consist of temporary aggregate patching, and final patching of the existing roadway after water main installation and median removal. This work shall be completed in accordance with Section 442 of the Standard Specifications and as directed by the Engineer.

For those areas to be patched as a result of water main installation, a temporary aggregate or permanent pavement patch will be allowed until the appropriate stage for construction of the pavement(s). Temporary aggregate patches will not be allowed in the areas of the median removal.

This work shall be paid for at the contract unit price per square yard for PAVEMENT PATCHING of the class and type specified which price shall include all equipment, labor and material necessary to construct the final patching area. Temporary aggregate will not be considered for separate payment, but considered included in the cost of the Water Main.

REMOVAL OF UNCLASSIFIED MATERIAL: The existing handrails, railroad ties/timbers, sign bases, and other unclassified materials not called out in the Summary of Quantities shall be removed as designated by the Engineer. The material removed as required in this Special Provision shall be disposed of outside the limits of the right of way in accordance with Article 202.03 of the Standard Specifications and as directed by the Engineer.

This work will not be paid for separately, but shall be considered included in the cost per cubic yard for EARTH EXCAVATION and no additional compensation will be allowed.

STORM SEWER CONNECTIONS: The cost of connecting existing storm sewers to the proposed drainage system shall be considered included in the cost of the proposed storm sewers or drainage structures involved. No additional compensation will be allowed.

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EXISTING DRAIN PIPES: All existing drainage pipes, tiles or downspouts which may be encountered during construction of the proposed improvement shall be connected to the storm sewer as detailed in the plans and to the satisfaction of the Engineer. All trenches shall be filled with trench backfill as specified in Section 550 of the Standard Specifications. The type of materials permitted for Storm Sewer (Special) shall be according to Article 550.03 for storm sewers, Type 2.

Basis of Payment: This work shall be paid for at the unit price per foot of STORM SEWER (SPECIAL) of the diameter specified which price shall include all equipment, labor and material, including trench backfill necessary to connect existing drain tiles/pipes to the storm sewer as specified herein and to the satisfaction of the Engineer.

DEBRIS: All debris of any type, large or small, encountered during any excavation shall be removed by the Contractor and disposed of at a site off the right of way.

This work will not be paid for separately, but shall be considered as included in the cost of the pay item for which the work is being completed.

EXISTING FRAMES AND GRATES: All frames and grates that are to be removed and which are not to be incorporated into the proposed improvement shall be carefully removed and stored by the Contractor. These items shall become the property of the City of Jacksonville and shall be removed from the job site by the City. This work shall be considered included in the contract and no additional compensation will be allowed.

TEMPORARY DRAINAGE INTO PROPOSED DRAINAGE STRUCTURES: This work shall consist of providing temporary drainage into any proposed drainage structure that is to be constructed in sag locations. These sag locations shall also be interpreted to include side streets.

Concrete curb and gutter shall not be placed at sag inlet locations until Hot-mix asphalt binder has been placed to allow for drainage into structure.

This work will not be paid for separately, but shall be considered as included in the contract unit price for the various pay items involved and no additional compensation will be allowed.

WATERMAIN REMOVAL: This work will consist of the removal of existing water mains, fittings, valves, meters, boxes and associated appurtenances associated with construction of the proposed watermain/services and storm sewer as shown on the plans and directed by the Engineer.

Basis of Payment: This work shall be paid for at the contract unit price per foot for WATER MAIN REMOVAL, regardless of size of material encountered, which price shall include all material, labor and equipment necessary to complete the work to the satisfaction of the Engineer. The removal of fittings, valves, meters, boxes and associated appurtenances shall not be paid for separately, but considered included in the cost of Water Main Removal.

ABANDONMENT OF EXISTING WATERMAINS: This work shall consist of abandoning existing watermains in place around the perimeter of Central Park Plaza as shown in the plans and as directed by the Engineer.

The work items shall include shutting off all valves and corporation stops. All exposed service lines and water mains to be abandoned that are exposed as a result of other construction activities shall be capped and thrust blocking installed. All service risers/boxes shall be removed to 2' below the limits of the proposed improvements. All work shall be as specified herein, as directed by the Engineer to meet the satisfaction of the City of Jacksonville.

Backfilling under existing or proposed roads, sidewalks, or other improved surfaces shall be completed using Trench Backfill as specified in Section 208 of the Standard Specifications.

Basis of Payment: This work shall be paid for at the contract unit price per lump sum for ABANDONMENT OF EXISTING WATERMAINS which price shall include all labor, equipment and materials, including trench backfill, to complete this item as specified and to the satisfaction of the Engineer.

FIRE HYDRANTS TO BE REMOVED: This work shall consist of the removal of existing fire hydrants as shown in the plans and as directed by the Engineer.

This work item shall be completed in accordance with the applicable portion of Section 564 of the Standard Specifications and to the satisfaction of the Engineer. The exposed water main shall be capped and thrust blocking installed as specified in the Special Provision for Abandonment of Existing Watermains. Fire hydrants shall be carefully removed and stored by the Contractor and shall become the property of the City of Jacksonville and shall be removed from the job site by the City.

Basis of Payment: This work shall be paid for at the contract unit price per each for FIRE HYDRANTS TO BE REMOVED which price shall include all labor, equipment and material necessary to complete the work as specified herein and to the satisfaction of the Engineer.

PAINT PAVEMENT MARKING CURB: This work shall consist of painting the top and face of existing or proposed barrier curb as shown on the plans and as directed by the Engineer. The work shall be completed in accordance with the applicable portions of Article 780 of the Standard Specifications.

Basis of Payment: The work of painting curbs shall be paid for at the unit price per foot PAINT PAVEMENT MARKING CURB which price shall include all labor, equipment, and material necessary to complete the work as specified herein to the satisfaction of the Engineer.

VALVE VAULTS TO BE REMOVED: This work shall consist of removing concrete, brick, or block water valve vaults on existing watermains to be abandoned or removed at the locations shown on the plans in accordance with the applicable portions of Section 605 of the Standard Specifications and as directed by the Engineer.

In removing the vaults, the contractor shall take particular care not to damage the existing valve to remain in place. The contractor shall be liable for any damage to the existing valve as a result of this operation.

Voids created by the removal of the vault shall be filled with Trench Backfill. In addition, those vaults located under existing pavement shall be patched with a Class C Patch, 8 inches in thickness. Pavement Patching shall be completed in accordance with Section 442 of the Standard Specifications.

Basis of Payment: This work shall be paid for at the contract unit price per each for VALVE VAULTS TO BE REMOVED, which price shall include all labor equipment, and material, including trench backfill and pavement patching, to complete this item as specified and to the satisfaction of the Engineer.

VALVE BOXES TO BE REMOVED: This work shall consist of removing valve boxes and risers from existing watermains to be abandoned at the locations shown on the plans and as directed by the Engineer.

In removing the risers and boxes, the contractor shall take particular care not to damage the existing valve to remain in place. The contractor shall be liable for any damage to the existing valve as a result of this operation.

Voids created by the removal of the valve box shall be filled with Trench Backfill. In addition, those in existing pavement shall be patched with a Class C Patch, 8 inches in thickness. Pavement Patching shall be completed in accordance with Section 442 of the Standard Specifications.

Basis of Payment: This work shall be paid for at the contract unit price per each for VALVE BOXES TO BE REMOVED, which price shall include all labor, equipment, and material including trench backfill and pavement patching, to complete this item as specified and to the satisfaction of the Engineer.

## BOLLARDS:

Description: This work consists of furnishing and installing cast aluminum bollards as detailed in the plans and as directed by the Engineer.

Submittals: The following items shall be submitted and approved prior to operations; product cut sheets.

Warranty: For a period of two years following acceptance of project contractor shall warranty against faulty installation and deterioration of bollards. Bollards also shall have the manufacturer's 5 -year limited warranty.

Products:
(a) Bollards

1. Bollards shall be cast aluminum alloy, with a floor cast as an integral part of the base and bollard cap welded in place. The lower base shall be octagonal that transitions to a fluted upper section. Base diameter shall be $16^{\prime \prime}$ and overall height shall be $58-1 / 2^{\prime \prime}$. Finish shall be black.
2. Four hot dipped galvanized "L" type non-quick release anchor bolts shall be provided for each bollard.
3. Bollards shall be Birmingham Unlighted Bollard as manufactured by Sternberg Lighting, 555 Lawrence Ave, Roselle, IL 60172, (t) 847-5883400 , www.sternberglighting.com or an approved equal.
(b) Concrete for footing shall be in accordance with Section 1020 Portland Cement Concrete, Type SI.
(c) Reinforcement shall be in accordance with Section 1006:10 Concrete Reinforcement Bars, Fabric, and Strand.

Construction Requirements
(a) Bollard shall be set in footings as shown on plans using anchor bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.

Note: All exposed surfaces shall be rubbed to a smooth, uniform finish.
(b) Any scuffing or surface marring shall be repaired to the satisfaction of the Owner.

Basis of Payment: This work will be paid for at the contract unit price per each for BOLLARDS which price shall include all equipment, materials and labor, including foundation, to complete this item as specified and to the satisfaction of the Engineer.

## CONCRETE SIDEWALK FINISHING:

Description: This work applies to concrete sidewalk surfaces within the project limits and consists of preparation of subgrade, forming, pouring and finishing concrete as detailed in the plans and as directed by the Engineer.

Submittals:
(a) The following items shall be submitted and approved prior to operations: proposed concrete mix.
(b) The following items shall be submitted during operations; concrete load tickets and concrete sample test results.

Products:
(a) Concrete shall be portland cement concrete in compliance with SI in accordance with Section 1020 of IDOT Standard Specifications.

Construction Requirements:
(a) Construction shall be in compliance with Section 424 Portland Cement Concrete Sidewalk.
(b) Construction joints shall be located as shown on the plans.
(c) Expansion joints shall be $1 / 2^{n}$ thick, full depth, $1 / 4^{\prime \prime}$ from the surface with sealer to fill the void as located on the plans.
(d) All joints shall be hand tooled and final surface finish shall be according to the plans.
(e) Finish Surface

1. All surfaces shall drain.
2. Tolerance. No greater than $1^{\prime \prime}$ in 10 from lines and grades shown on plan.

This work shall not be paid for separately, but considered included in the cost of Portland Cement Concrete Sidewalk 4 Inch.

## ORNAMENTAL FENCE:

Description: This work consists of furnishing and installing fabricated decorative steel fencing as detailed in the plans and as directed by the Engineer.

Submittals: The following items shall be submitted and approved prior to operations; product cut sheets, fully detailed shop drawings.

Warranty: For a period of two years following acceptance of project contractor shall warranty against faulty installation and deterioration of fence.

Products:
(a) Decorative Fence

1. Ornamental iron fence, $4^{\prime}$ high with 3 rails, rings and top ornamentation, nominal $48^{\prime \prime}$ ht., $95-1 / 2^{\prime \prime}$ long.
2. Posts 2-1/2" square.
3. Brackets BB310 Commercial Line Boulevard.
4. Fence and posts galvanized iron, with epoxy base coating, color to be black. Hardware to match.
5. Fence shall be Aegis Plus, Majestic Style as manufactured by Ameristar, 1555 N. Mingo Rd., Tulsa, OK 74116, (t) 800/321-8724 www.ameristarfence.com or an approved equal.
(b) Fence Materials
6. Steel for fence framework (tubular pickets, rails and posts) shall conform to the requirements of ASTM A924/A924M with minimum yield strength of 50,000 psi. The steel shall be hot-dip galvanized to meet requirements of ASTM A653/A653M with a minimum zinc coating weight of $0.90 \mathrm{oz} / \mathrm{ft} 3$, Coating Designation G-90.
7. Material for pickets shall be $3 / 4^{\prime \prime}$ square $\times 16 \mathrm{Ga}$. tubing. Cross-sectional shall be $1.5^{\prime \prime}$ square with minimum thickness of 14 Ga . Picket holes shall be spaced $4.7^{\prime \prime}$ o.c. Picket retaining rods shall be $0.125^{\prime \prime}$ diameter. galvanized steel. Posts shall be a minimum 2-1/2" square $\times 12 \mathrm{Ga}$. High quality PVC grommets shall be supplied to seal at picket-to-rail intersection.
8. The manufactured galvanized framework shall be subjected to the PermaCoat thermal stratification coating process. Coating shall meet manufacturer's published Performance Standards.
(c) Fence Fabrication
9. Pickets, rails and posts shall be pre-cut to specified lengths. Rails shall be pre-punched to accept pickets.
10. Grommets shall be inserted into the pre-punched holes in the rails, and pickets shall be inserted through the grommets so that pre-drilled holes in pickets align with the internal upper raceway of the rails. Retaining rods shall be inserted into each rail so they pass through the pre-drilled holes in each picket to complete the assembly.
11. Completed panels shall be capable of supporting a 400 lb . load applied mid-span without deformation.
(d) Concrete for footing shall be in accordance with Section 1020 Portland Cement Concrete, Type SI.
(e) Reinforcement shall be in accordance with Section 1006.10 Concrete Reinforcement Bars, Fabric, and Strand.

Construction Requirements:

## (a) Fence Post

1. Excavate for concrete footings to dimensions shown on plans. Note: Footings are not elevated above the ground and some are shared with bollards where noted in the plans.

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2. Any excavations left open shall be well secured.
3. Place concrete into footing excavations and set steel posts straight and true. Hold position until the concrete has cured.
(b) Fence Panels

1. Panels shall be securely attached. Planes shall be straight and true. Panels shall be handled to avoid scrapes, scratches and other damage. Damaged panels may be rejected.
2. Attach panels to posts using panel brackets supplied with bolt-on hardware supplied by manufacturer.
(c) Finishing
3. Any minor scuffing shall be touched-up with coating to match recommended by fence supplier. Unacceptable repairs may be rejected

Basis of Payment: This work will be paid for at the contract unit price per foot for ORNAMENTAL FENCE which price shall include all equipment, materials and labor, including foundation, to complete this item as specified and to the satisfaction of the Engineer.

## PERGOLA:

Description: This work consists of furnishing and installing a prefabricated pergola as detailed in the plans and as directed by the Engineer.

Submittals: The following items shall be submitted and approved prior to operations; shop drawings for structure, sealed plans for anchors and footings.

Warranty: For a period of two years following acceptance of project contractor shall warranty against faulty installation and deterioration. Product warranties shall also apply.

Products:
(a) Pergola

1. Pergola shall be steel construction, prefabricated, drilled and packaged for on-site erection. Pergola is a manufacturer's standard unit, modified with extended sides and curved horizontal tube tensioning members near the top and bottom of the posts.
2. Contractor shall provide manufacturer with project plans and specifications and all other necessary information.

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3. Steel components shall be shotblasted, etched, phosphatized, preheated and electrostatically powder-coated with TGIS polyester power coatings. Color shall be evergreen.
4. Posts shall be surface mounted with anchor bolts (concealed in posts) provided by manufacturer.
5. Pergola shall be Greco Pergola \#21 as manufactured by Poligon Park Architecture 4240 North 136 Avenue, Holland, MI 49424, (t) 800-3547721, www.poligon.com or an approved equal.
(b) Concrete for footing shall be in accordance with Section 1020 Portland Cement Concrete, Type SI.
(c) Reinforcement shall be in accordance with Section 1006.10 Concrete Reinforcement Bars, Fabric, and Strand.
(d) Aggregate shall be in accordance with Section 1003 Fine Aggregates and Section 1004 Coarse Aggregates.

Construction Requirements:
(a) Pergola shall be installed according to manufacturer's recommendations.
(b) Anchors and footings shall be constructed according to sealed plans provided by Contractor.

Basis of Payment: Pergola will be paid for at the contract unit price of lump sum for PERGOLA which price shall include all equipment, materials and labor, including foundation, to complete this item as specified and to the satisfaction of the Engineer.

## LANDSCAPE PLANTING MATERIAL:

Description: This work shall consist of providing and installing plant material, excavating unacceptable material and replacing with topsoil if necessary, applying herbicide, mulching plant material, mulching existing trees, stake trees if necessary, and provide maintenance as specified herein and as directed by the Engineer. All work shall be completed in accordance with Section 253 and 254 of the Standard Specifications and the following:

Submittals:
(a) The following items shall be submitted and approved prior to operations; proposed sources of plant material and digital photos of plants, one cubic foot sample proposed topsoil, one cubic foot sample of Medium-Textured Hardwood Mulch and one cubic foot sample of Fine-Textured Hardwood Mulch.
(b) The following items shall be submitted during operations; tags from all fertilizer, peat moss and manure used in the project, tags from all plant material showing species, size and source.

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Products:
(a) Topsoil shall be loamy soil from the A horizon soil profile of local prairie-type soils, have an organic content between 10 and 15 percent, be entirely free of foreign material including construction waste, rocks and aggregate, litter and contaminating products and have a pH between 6.0 and 8.0. At least 90 percent must pass the 2.00 mm sieve.
(b) All plant materials shall be approved by the Engineer prior to installation, shall be clearly marked as to source, species and size, specimen quality, conform to the species and sizes specified, have a growth habit representative of that species and be free from diseases, insect pests and injuries.

1. Balled and Burlapped (B\&B) Plants shall
a. Be grown in a nursery with climatic conditions similar those at the project site. B\&B plants grown south of the St. Louis latitude will not be accepted.
b. Have a single leader unless otherwise specified.
c. Have been pruned frequently while growing in the nursery to avoid forked leaders, low or uneven branching, asymmetric growth, crossed limbs, scars from pruning, etc.
d. Be dug only when plants are dormant.
e. Be dug in accordance with best nursery practices.
f. Have solid earthen balls that encompass the fibrous and feeding roots of the plant.
2. Container Grown Plants shall:
a. Be grown in pots of specified size with high quality rooting medium within 1 inch of the top of the container.
b. Be well grown-in with roots that fully encompass the rooting medium.
c. Have tops that are full and healthy at the time of planting.
3. Backfill Mixture
a. Backfill Mixture for planting holes shall be a uniform mixture of eight (8) parts rich topsoil provided by the contractor from which all foreign material and particles greater than $1^{\prime \prime}$ in any dimension have been removed, one (1) part peat moss and one (1) part manure.
b. Peat moss shall be free from foreign material such as soil and wood and shall have uniform particle sizes not exceeding $1 / 4^{\prime \prime}$ in any dimension.
Manure shall be well rotted, unleached horse or cattle manure free from foreign material and containing no phytotoxic substances.
4. Medium-Textured Hardwood Mulch shall be composted, shredded hardwood of particles no larger than $4^{\prime \prime}$ in any dimension and free of all foreign materials and approved by the Engineer.
5. Fine-Textured Hardwood Mulch shall be composted, shredded hardwood of particles no larger than $2^{\prime \prime}$ in any dimension and free of all foreign materials and approved by the Engineer.
6. Fertilizer shall be slow release granular form and contain $14 \%$ nitrogen, $14 \%$ phosphoric acid and $14 \%$ potash.
7. Pre-emergent herbicide shall be a slow-release granular type specifically recommended for use in new planting areas.
8. Water may be obtained by Contractor from metered hydrants. Prior to use of hydrants, a meter shall be obtained from the Jacksonville Water Department by contacting the Water Superintendent at 479-4615 or 4794660.

Delivery, storage and handling
(a) Plant material shall be delivered to the site within 48 hours of its scheduled installation.
(b) All Plant Material shall be transported and handled to avoid physical damage and desiccation of the plants. Protective covering shall be used during shipment.
(c) At the site plants shall be kept in the shade and protected from weather and mechanical damage. Roots shall be kept moist. The name of one plant of each variety shall be clearly marked.
(d) All packaged material shall be delivered in containers showing the weight, analysis and name of manufacturer. Material shall be protected from deterioration during delivery and storage at the site.
(e) During installation, material shall be handled to avoid damage to all plant parts. Should any plant parts be accidently damaged during operations, the Engineer shall decide if immediate replacement is required.

Construction Requirements:
(a) Time of operation. Planting shall be done when the climatic and soil conditions are appropriate as confirmed by Engineer.
(b) Layout

1. Contractor shall determine the location of all utilities at the site and avoid digging where utility damage could result.
2. Contractor shall stake the location of each tree and the perimeter of each shrub and planting bed to the satisfaction of the Engineer.
3. It shall be the Contractor's responsibility to locate utilities prior to layout and to avoid any conflicts and damage thereto.
(c) Tree and Shrub Plant Excavation
4. Excavations for plants shall have near vertical sides and flat bottoms.
5. Excavations for trees shall be over excavated by 12 " on all sides.
6. Shrubs shall be over excavated by 6 inches on all sides. If the sides or bottom of the excavated hole is comprised of cinders, aggregate, rubble, clay, or other material unsuited as a growth medium for plants, Contractor shall continue excavation of the pit and backfill the excavation with approved topsoil prior to planting. The excavations and backfill dimensions shall be:
a. For trees of all sizes, excavation and backfill shall be $4^{\prime} \times 4^{\prime} \times 4^{\prime}$ in dimension.
b. For shrubs, hedges, shrub beds and flower beds, excavation and backfill shall be 2 deep, and extend beyond the outside plants a distance of 2 '.
c. Contractor shall dispose of excess excavated material off the site.
d. No excavations shall be left open overnight.
(d) Tree and Shrub Planting
7. Plants shall be set in excavations with topsoil fill at the same level at which they were grown and backfilled with Backfill Mixture.
8. Burlap around balled and burlapped ( $\mathrm{B} \& B$ ) plants shall be opened completely at the top, pulled back and tucked around the sides of the ball.
9. 10 grams (of actual fertilizer nutrients) for each $1 /{ }^{\prime \prime}$ " of plant diameter and 5 grams actual fertilizer nutrients) for every gallon of container material shall be placed firmly in the backfill mixture.
10. Backfill Mixture shall be placed in lifts of 12 inches around root balls and firmly and tamped.
(e) Tree and Shrub Saucers of Soil
11. Trees. A rim of soil $4^{\prime \prime}$ high, 8 " wide and 4 feet in diameter shall be formed round each tree to form a saucer.
12. Shrub masses and hedges. A rim of soil $2^{\prime \prime}$ high, $4^{\prime \prime}$ wide and 1 foot beyond the outermost stems shall be formed around shrub masses and hedges to form a saucer.
(f) Tree and Shrub Watering
13. Plants shall be thoroughly watered-in within 4 hours of installation. Watering and other maintenance shall continue per these specifications.
14. Pre-emergent Herbicide All areas for mulch shall be treated with preemergent herbicide according to approved application rate prior to placement of mulch.
(g) Tree and Shrub Mulch
15. Trees shall be mulched 4 inches in depth with Medium Textured Hardwood Mulch within and overlapping the saucer of soil. Mulch shall be held back 3-4" from tree trunks.
16. Shrubs shall be mulched 4 inches in depth with Medium Textured Hardwood Mulch within and overlapping the saucer of soil. Mulch shall be held back $3-4$ " from shrub stems.
17. Shrub masses and hedges shall be mulched 4 inches in depth with Medium Textured Hardwood Mulch continuously through the area. Mulch shall be held back $3-4$ " from shrub stems.
18. Existing trees and shrubs shall be mulched as follows:
a. For trees, areas surrounding the trunks measured 4' out from the trunk shall be cleared of any other vegetation. Herbaceous plants shall be pulled. Woody vegetation will be cut at ground level and treated with herbicide to inhibit regrowth.
b. For shrubs, areas surrounding the stems and extending to adjacent buildings, sidewalks or other defining elements shall be mulched.
c. Areas shall be treated with pre-emergent herbicide according to product recommendations.
d. Areas shall be covered with a 4 -inch depth of Medium Textured Hardwood Mulch. Mulch shall be held back 3-4" from tree trunks and shrub stems.
(h) Tree and Shrub Pruning
19. Pruning and limbing-up shall be done when plants are dormant, except for mechanical damage that will be repaired immediately, using good nursery practices.
20. Plants shall be pruned to remove any damaged branches, irregular branching, crossed limbs, etc. and result in a symmetric shape typical of the species. Trimmings shall be disposed of off-site.
21. Shade trees shall be limbed-up to a height of 7-8 feet above the ground or as directed by Engineer.
(i) Plant Support
22. Tree staking is not required at the time of planting.
23. If trees begin leaning for any reason, Contractor shall right and immediately stake those trees according to project drawings and specifications.
(j). Preparation of Perennial and Ground Cover Beds
24. Beds shall be tilled to a depth of 8 inches forming particles no greater than 1 inch.
25. Beds shall be covered with a 2-inch depth of peat moss and a 2-inch depth of manure, and tilled again to a depth of 8 inches to thoroughly mix the materials.
26. Areas for mulch shall be treated with pre-emergent herbicide according to product recommendations prior to placement of mulch.
27. Beds shall be covered with mulch 2 inches of Fine Textured Hardwood Mulch.
(k) Perennial and Ground Cover Beds Planting
28. Bulbs shall be planted in September or October, set in ground at a depth of approximately $3 x$ the height of the bulb, backfilled and firmly hand tamped.
29. Plants shall be set on prepared soil at the elevation at which they were grown and firmly tamped-in.
30. Mulch shall be re-distributed uniformly over the area.
(I) Watering
31. Beds shall be thoroughly watered-in within 4 hours of installation.
32. Watering and other maintenance shall continue until project acceptance.
(m) Maintenance
33. Monitoring
a. Contractor shall carefully monitor the condition of Plant Material during this maintenance period and provide all necessary maintenance for the survival and optimum health of the plant material, including:
34. Watering
a. Amount and frequency of watering using the irrigation system (part of this project) and of supplemental watering shall be scheduled to optimize the establishment of plant material.
b. All setting and monitoring of the irrigation system is the responsibility of the Contractor.
c. Plants generally shall be watered to achieve a rate of 10 gallons for each tree every 4 days, and 5 gallons for every shrub every 4 days, and 5 gallons per square yard of flower beds every 2 days.
d. Rainfall may relieve the Contractor of watering at certain times.
e. Contractor shall monitor conditions and resume watering when needed. Watering shall be done with sprinklers or in a manner to achieve infiltration of water and avoid run-off.
35. Weeding
a. Contractor shall weed plant material and mulched areas to keep the area weed-free.
b. Generally, weeding shall be done by hand pulling. Any use of herbicides must be approved by the Engineer in advance and applicator must be licensed for commercial use of herbicides.
36. Insects, Disease, Fungus
a. Should problems with the plant material develop such as insect infestation, disease or fungus, Contractor shall immediately notify the Engineer and discuss remedies available.
b. Contractor shall proceed expeditiously with selected treatment of affected areas, and continue treatment until the problem is resolved.
c. Contractor shall have state licensed applicators for treatment products as needed.
37. Staking
a. Tree staking shall not be required, unless trees begin leaning for any reason.
b. Leaning trees shall be immediately reset if possible and staked using a three-point staking system acceptable to the Engineer.
38. Fill of Settlement Areas
a. Any fill areas that settle shall be restored to finish grade by filling with top soil and replacing surface improvements.

Basis of Payment:
(a) Trees and Shrubs shall be paid for according to Article 253.17 of the Standard Specifications. Perennial, Ground Cover, and Ground Cover Mix shall be paid for at the contract unit price per each Perennial, groundcover, and Groundcover Mix of the type specified. Payment for work shall include all labor, equipment, and materials necessary to complete the work as specified herein and to the satisfaction of the Engineer. Mulch, fertilizer, and maintenance will not be paid for separately, but considered included in the cost of the individual item being planted.
(b) Top soil planting pits will be paid for at the contract unit price per cubic yard for TOPSOIL FURNISH AND PLACE, SPECIAL which price shall include equipment, materials and labor to complete the work as specified and to the satisfaction of the Engineer. Excavation of unsuitable soil will not be paid for separately but considered included in the cost of this item.

## SITE FURNISHINGS:

Description: This work consists of furnishing and installing the following site furnishings as detailed in the plans and as directed by the Engineer: Benches, Trash Receptacles, Bike Racks and Flag Pole.

Submittals: The following items shall be submitted and approved prior to operations; product cut sheets for each item, sealed foundation plan for flag installation.

Warranty: For a period of two years following acceptance of project contractor shall warranty against faulty installation and deterioration. Product warranties shall also apply.

Products:
(a) Benches

1. All fabricated metal components shall be shotblasted, etched, phosphatized, preheated and electrostatically powder-coated with TGIS polyester power coatings.
2. Benches shall be 6 -foot length surface mount by non-quick release anchor bolts provided for each bench.
3. Benches shall be Estate Series, ES42-05 with solid steel back slats, color black as manufactured by Wabash Valley, P.O. Box 5, Silver Lake IN, 46982, (t) 800-253-8619, www.wabashvalley.com or an approved equal.

## (b) Trash Receptacles

1. Trash Receptacles shall be $31-1 / 4^{\prime \prime}$ high with a $21^{n n}$ base and 32 -gallon capacity,
2. All fabricated metal components shall be shotblasted, etched, phosphatized, preheated and electrostatically powder-coated with TGIS polyester power coatings.
3. Optional Rain Bonnet Lid shall be attached to the frame with two vinyl coated steel aircraft cables.
4. Liner shall be high-density plastic formed to fit the receptacle.
5. Trash Receptacles shall be Production Series, PRS-36 with optional Rain Bonnet lid, color black as manufactured by Victor Stanley, Inc, P.O. Drawer 330, Dunkirk, MD 0754, (t) 800-368-2573, www.victorstanley.com or an approved equal.
(c) Bike Racks
6. Bike Racks shall be $66^{\prime \prime}$ wide, $36^{\prime \prime}$ high (capacity 6 bikes) hot-dipped galvanized with powder coating.
7. Benches shall be surface mount by four non-quick release anchor bolts provided for each mounting plate.
8. Bike Racks shall be Model \#MF9009 as manufactured by Wausau Tile Site Furnishings, P.O. Box 1520, Wausau, WI 54402, (t) 800-388-8728, www.wasautile.com or an approved equal.
(d) Flag Pole
9. Pole shall be $30^{\prime}$ high stainless steel tapered pole with stainless steel cable, internal halyard and a removable crank handle.
10. Pole shall be surface mount.
11. Flag Pole shall be Model \#ECA30IH as supplied by American Flags Express, 12577 W. Custer Avenue, Butler, WI 53007, (t) 262-783-4800, www.flagsexpress.com or an approved equal.
(e) Concrete for footing shall be in accordance with Section 1020 Portland Cement Concrete, Type SI.
(f) Reinforcement shall be in accordance with Section 1006.10 Concrete Reinforcement Bars, Fabric, and Strand.
(g) Aggregate shall be in accordance with Section 1003 Fine Aggregates and Section 1004 Coarse Aggregates.

Construction Requirements:
(a) Benches shall be set on concrete slabs as shown on plans using anchor bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.
(b) Trash Receptacles shall be set on concrete sidewalks bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.
(c) Bike Racks shall be set on concrete slabs as shown on plans using anchor bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.
(d) Flag Pole shall be mounted on foundation per sealed drawings.
(e) Any scuffing or other surface marring shall be repaired to the satisfaction of the Owner.

Basis of Payment:
Benches shall be paid for at the contract unit price per each for BEnk-HE which price shall include all equipment, materials and labor, including base, to complete this item as specified and to the satisfaction of the Engineer.

Trash Receptacles will be paid for at the contract unit price per each for TRASH RECEPTACLES which price shall include all equipment, materials and labor to complete this item as specified and to the satisfaction of the Engineer

Bike Racks will be paid for at the contract unit price per each for BICYCLE RACKS which price shall include all equipment, materials and labor, including concrete base, to complete this item as specified and to the satisfaction of the Engineer.

Flag Pole will be paid for at the contract unit price per each for FLAG POLES which price shall include all equipment, materials and labor, including foundation, to complete this item as specified and to the satisfaction of the Engineer.

## SODDING:

Description: This work shall consist of soil preparation, fertilizer application, sodding, and maintenance as specified herein and as directed by the Engineer. All work shall be completed in accordance with Section 252 of the Standard Specifications and the following:

Submittals:
(a) The following items shall be submitted and approved prior to operations; sod source and composition, photographs and/or samples of sod if requested, fertilizer composition and quantity calculation, products and rates for any chemical treatments necessary.
(b) The following items shall be submitted during operations; sod certificates showing source, composition and quantity of each load, and fertilizer certificates showing weight and fertilizer mix for each bag.

Products:
(a) Topsoil shall be loamy soil from the A horizon soil profile of local prairie-type soils, have an organic content between 10 and 15 percent, be entirely free of foreign material including construction waste, rocks and aggregate, litter and contaminating products and have a pH between 6.0 and 8.0. At least 90 percent must pass the 2.00 mm sieve.
(b) Sod

1. Sod shall be top quality, 12 to 18 month old turf-type fescue sod, dense with basil growth and full at the tops, free of weeds and non-turf growth, insects and disease, fungus and other conditions that indicate past, current or future conditions requiring special treatment or care.
2. Sod shall be comprised of $90 \%$ of seed shall be comprised of 3 or more varieties premium turf-type fescue such as Dynasty, Olympic Gold II and Endeavor and $10 \%$ of seed shall be comprised of 1 or more aggressive bluegrass varieties such as Brooklawn, mixed seeded and managed to result in sod with a uniform mix of grass varieties.
3. Grass shall be cut between $2^{\prime \prime}$ and 3 " before sod is cut and sod shall be uniformly cut $1 / 4$ to $1 / 2$ inch thick in $20^{\prime \prime}$ by $40^{\prime \prime}$ pieces or other approved dimensions.
4. Sod shall comply with state and federal regulations including inspection for diseases and insects.
(c) Fertilizer shall be a ratio 1:1:1. Agricultural Ground Limestone shall be applied at a rate of 2 ton/acre.
(d) Turf Stakes, if needed, shall be a length that extends through the turf mat and into underlying soil a minimum of 4 inches. Stakes shall be bio-degradable.

Delivery, storage and handling:
(a) The sod shall be transported and handled to avoid physical damage and desiccation. Protective covering shall be used during shipment. At the site sod shall be kept in the shade and protected from the weather and mechanical damage. Sod shall be kept moist at all times and exposed roots physically protected from dehydration.
(b) Fertilizer may be delivered separately or premixed in sacks in which case each sack shall bear a tag with the following information clearly printed: name and address of manufacturer, brand, weight, chemical composition, and guarantee of analysis. Fertilizer shall be kept dry.

Construction Requirements:
(a) Time of operation.

1. Sod shall be installed when the soil can be properly prepared and when sod can be laid and maintained successfully as verified by the Engineer.
2. Sod shall be laid only when the irrigation system (part of this project) is fully operational.
(b) Soil shall be prepared as follows:
3. Soils shall be tilled to a full depth of 6 " and worked until the surface is smooth and soil particles are no greater than 1 " in any dimension.
4. All debris, stones and other foreign material, as well as soil clods greater than 1 " in any dimension will be removed from the site.
5. If any cinders, aggregate, rubble, clay, or other material unsuited as a growth medium for plants are found during tilling operations, Contractor shall excavate to a depth of 12 ", removing all foreign material and compacted clay soils.
6. Contractor shall place approved topsoil in all excavated areas. If good topsoil is found and can be segregated, excavated topsoil can also be used for fill.
7. Contractor shall dispose of excess excavated material off the site. Along pavements, around drains, and other edges where sod meets hard surfaces, the tamped-soil grade shall be $1 / 2^{\prime \prime}$ below the adjoining hard surfaces to assure that the soil level of the sod is at the grade of adjoining hard surfaces.
8. All areas shall drain and no ponding water shall be allowed.
9. Fertilizer shall be spread uniformly over the area to be sodded at the rate to result in 60 pounds of actual nutrient of each $\mathrm{N}, \mathrm{P}$ and K per acre (1.4 pounds per 1000 sq.ft.) and incorporated along with the specified rate of 2 ton/acre of Agricultural Ground Limestone in the top 2" of soil.
10. Soil shall be raked and rolled as necessary to achieve a smooth surface. The soil surface shall be covered with sod before developing a crust.
(c) Sodding:
11. Sod shall be delivered in sufficient time and quantities to maintain the approved construction schedule and to assure that no sod is used which has been cut more than 24 hours in advance. No more sod than that which can be laid in a period of 24 hours shall be delivered to the site.
12. Sod shall be placed on the ground with the longer dimension parallel to streets and sidewalks, edges in contact with each other and adjacent hard surfaces (buildings, sidewalks, parking lots), pieces neatly matched and joints of courses staggered.
13. Sod shall be neatly cut 4 feet around tree trunks and 2 feet around shrubs and shrub masses. All exposed edges of sod shall be buried flush with the adjacent soil.
14. Within 1 hour after the sod has been laid, the irrigation system (part of this project) shall be operated. 5 gallons of water per square yard shall be uniformly applied to the sod in a manner to allow infiltration of water and avoid run-off. 5. Supplemental watering shall be done as needed. All shall provided by Contractor.
15. Sod shall be thoroughly rolled as needed to achieve a smooth surface and close contact of sod with soil and/or to remove minor irregularities in the surface.

## (d) Maintenance:

Contractor shall set the irrigation controller at optimum settings for sod establishment and carefully monitor the condition of the sod, adjusting controller settings and providing supplemental watering as necessary, for a period of 60 days or until project acceptance, whichever is longer.

During the maintenance period, Contractor shall provide:

## 1. Watering

a. Adjust controller settings and providing supplemental watering as necessary to optimize the establishment and maintenance of sod.
b. Sod generally shall be watered to achieve a rate of 5 gallons per square yard every 2 days.
2. Mowing
a. Contractor shall mow sod as soon as the grass reaches a height of 4 ".
b. Grass shall be mowed to a height of 2 to $2-1 / 2$ inches using mowers with sharp, level blades.
c. Care shall be taken to avoid trees, shrubs and flowerbeds during mowing operations. Damage to existing or new trees or other plants shall be repaired or plants shall be replaced as determined by the Engineer.
3. Insects, Disease, Fungus
a. Should problems with the turf develop such as insect infestation, disease or fungus, Contractor shall immediately notify the Engineer and discuss remedies available.
b. Contractor shall proceed expeditiously with selected treatment of affected areas, and continue treatment until the problem is resolved.
c. Contractor shall have state licensed applicators for treatment products as needed.
4. Temporary Controls
a. It is recommended that sodded areas not be used until sod has established, a period usually 2-3 weeks.
b. Contractor may erect temporary controls, such as small temporary signs or construction ribbon attached to stakes, to keep foot traffic off newly sodded areas. Such controls shall be coordinated with the Owner.
5. Staking
a. Turf stakes will not be required, provided the turf is well rooted-in within 6 weeks of installation.
b. If turf is not rooted-in, as evidenced by edges or areas becoming dislodged, turf stakes shall be installed as determined necessary by the Engineer to hold sod in place.

Basis of Payment:
Sodding shall be paid for at the contract unit price per square yard for SODDING which price shall include all equipment, materials and labor to complete this item, including maintenance, as specified herein and to the satisfaction of the Engineer. The payment schedule shall be in accordance with Article 252.13 of the Standard Specifications. Fertilizer and agricultural ground limestone will be paid for according to Article 250.10 of the Standard Specifications.

## UNIT PAVERS (SPECIAL):

Description: This work shall consist of the installation of unit pavers as detailed in the plans and as directed by the Engineer and consists of preparation of subbase, concrete base slab with weep holes, setting sand or neoprene adhesive and concrete unit pavers.

Submittals:
(a) The following items shall be submitted and approved prior to operations: information about proposed unit pavers, samples: minimum of 2 pavers representing full range of paver coloration and list of equipment anticipated for the work.
(b) The following items shall be submitted during operations; concrete load tickets and concrete sample test results

Products:
(a) Unit Pavers to be furnished shall be in accordance with Article 1042.15(d) and the following:

1. Unit pavers shall be rectangular pavers of nominal dimension $4^{\prime \prime} \times 8$ " $\times 2$ $3 / 4$ " with beveled edges and spacer lugs.
2. Unit pavers shall be Holland Premier Paver, color: Heritage Brown as manufactured by Unilock, 301 E. Sullivan Road, Aurora, IL 60504, 716/822-6074 or an approved equal.
(b) Setting sand shall be fine crushed stone aggregate gradation FA8 in compliance with IDOT Standard Specifications Section 1003, Fine Aggregate.
(c) Neoprene tack coat shall be durable adhesive specifically recommended by paver manufacturer.
(d) Base shall be portland cement concrete in compliance with SI in accordance with Section 1020 of IDOT Standard Specifications.

Construction Requirements:
(a) Time of operation. Pavers shall be installed when the base can be properly prepared and when setting sand is dry.
(b) Concrete base shall include the following in accordance with Section 424, PC Concrete Sidewalk.

1. Preparation of grade
2. Installation of concrete base
3. Concrete Base shall have weep holes for drainage as shown on plan.
(c) Setting on Sand Base
4. Setting Sand shall be placed over concrete base to a fluffed-up thickness of $1 / 2^{\prime \prime}$ minimum to $1^{\prime \prime}$ maximum.
5. Sand shall be screeded over entire area to provide a smooth and uniformly sloped surface.
6. Pavers shall be set on an area of freshly screeded sand. It is recommended that an area of pavers be installed and vibrated in place the same day.
7. Pavers shall be set according to manufacturer's recommendation in patterns shown on plans.
8. Pavers shall be cut as necessary to fill paved areas. Cuts shall be at precise angles with no chipping or broken edges.
9. Sand shall be swept between joints. Paved areas shall be mechanically vibrated to achieve a uniform surface. The process shall be repeated until joints are completely filled and the surface is smooth and uniform.
10. Surface shall be carefully checked. Any cracked or broken pavers shall be removed and replaced.
(c) Setting with neoprene tack coat.
11. Where shown on plans, pavers shall be set with neoprene tack coat as recommended by manufacturer.
12. Pavers shall be set according to manufacturer's recommendation in patterns shown on plans.
13. Pavers shall be cut as necessary to fill paved areas. Cuts shall be at precise angles with no chipping or broken edges.
14. Sand shall be swept between joints until joints are completely filled and the surface is smooth and uniform.
15. Surface shall be carefully checked. Any cracked or broken pavers shall be removed and replaced.
(d) Finish Surface
16. All unit paver areas shall drain.
17. Tolerance. No greater than $1^{\prime \prime}$ in 10 from lines and grades shown on plan.

Basis of Payment:
(a) Unit Pavers on Sand Bed will be paid for at the contract unit price per square foot for UNIT PAVERS ON SAND BED which price shall include all equipment, materials and labor, including concrete base slab, setting sand, and unit pavers, to complete this item as specified and to the satisfaction of the Engineer.
(b) Unit Pavers on Neoprene Coat will be paid for at the contract unit price per square foot for UNIT PAVERS ON ADHESIVE which price shall include all equipment, materials and labor, including concrete base slab, neoprene adhesive, and unit pavers, to complete this item as specified and to the satisfaction of the Engineer.

## IRRIGATION SYSTEM:

Description: This work consists of furnishing and installing a complete irrigation system including a backflow preventer, rain sensor, master shutoff valve, isolation valves, zone valves, irrigation heads of various types, all plumbing and electrical work and a warranty as detailed in the plans and as directed by the Engineer.

Submittals:
(a) The following items shall be submitted and approved prior to operations:

1. Layout plan for any proposed changes in irrigation layout.
2. List of all component parts proposed for use.
(b) The following items shall be submitted after operations;
3. As-built irrigation plan.
4. Manufacturer's operation and maintenance data, including instructions for operation and maintenance of system and a manufacturer's parts catalog.
5. A schedule of the length of time each valve is required to be open for various amounts of water.

Warranty: For a period of two years following acceptance of project Contractor shall warranty for all parts and labor.

Conditions and Standards:
(a) Utilities at site

1. A minimum 1-1/2-inch water service
2. A 120 -volt electric service
(b) Irrigation Plan
3. Irrigation Plan is diagrammatic
a. Irrigation main and laterals can be combined in trenches.
b. Zone valves can be combined in multiple zone housings.
c. Heads shall be located within $4^{\prime \prime}$ of the edge of pavements.
4. Any proposed changes in Irrigation Plan must be approved prior to installation.
(c) Irrigation Coverage
5. Irrigation shall be provided for turf areas as shown on the plan. Turf areas shall receive a uniform rate of water and all turf areas shall receive irrigation from at least two sprinkler or rotor heads.
6. Irrigation shall be provided for shrubs and flower beds with drip lines.
(d) All water and electric lines under pavements shall be placed in PVC conduit as shown on plan.

Products:
(a) All irrigation components, including controller, rain sensor, sprinklers, rotor heads and quick couplers shall be manufactured by one irrigation product manufacturer and meeting the requirements of these specifications. Acceptable irrigation manufacturers are:

1. The Toro Company
2. Rain Bird Corporation
3. Approved Equal
(b) Controller shall have 36 stations in a metal housing with metal lockable cover.
(c) Rain Sensor shall be a wireless sensor, battery-operated, relayed to a receiver capable of delaying controller programs.
(d) Master Valve shall be a brass bodied, manual valve sized for the main pipe.
(e) Zone Valves
4. Zone valves for rotor head zones shall be electric, in-line angle valves, sized for line diameter.
5. Zone valves shall be for spray and drip zones shall be electric, pressure regulated, in-line angle valves, sized for line diameter.
(f) Pipe Materials
6. Irrigation main shall be rigid Class 160 PVC.
7. Irrigation laterals shall be Class 200 Plastic Pipe.
8. Fittings for pipes shall be Schedule 40 solvent weld type.
9. Solvent Cement shall be ASTM D2564 for PVC pipe and fittings.
(g) Electric control wire shall be \#18 gauge copper multi-conductor irrigation cable for direct burial. The neutral wire shall be white.
(h) Backfill for trenches shall be fine soil free of stones and foreign material. Excavated material may be used if acceptable.

Execution
(a) Water Pressure Check

1. Water pressure at the service location shall be checked by contractor prior to beginning irrigation installation. If pressure varies more than 5 p.s.i. than that shown on plans, Contractor shall contact Engineer immediately to determine if plan adjustments are needed prior to irrigation installation.
(b) Preparation
2. Contractor shall determine the location of all utilities at the site.
3. Contractor shall review layout requirements of other project work which may affect irrigation layout.
4. Exact alignment of irrigation lines shall be done to avoid conflict with underground obstructions, structures, plants, etc.
5. Contractor shall provide safeguards to protect structures, roads, walkways, etc. from possible damage during construction.
(c) Controller
6. Controller shall be mounted in the utility room of the restroom facility.
(d) Rain Sensor
7. Rain Sensor receiver shall be mounted near the irrigation controller.
8. The sensor and transmitter should be mounted at/near a west-facing wall within 200-250 ft. of the receiver.
(e) Master Valve
9. Master Valve shall be mounted in below-ground valve box.
10. A Tee blow-out connection also shall be provided in the box.
(f) Irrigation Sleeves
11. Contractor shall install PVC sleeves under pavements as shown on the plan. Pipe ends shall be clearly marked for later use.
(g) Trenching
12. Trenches for irrigation system shall be excavated so that all pipes will be buried a minimum of 12 inches deep. In the vicinity of existing structures and utilities, excavation shall be done by hand. Pipe may be mechanically pulled, if conditions are proper and the method is authorized by the Owner's Representative prior to work.
13. Trench shall be free of stones, debris or sharp objects prior to placing pipe.
(h) Piping
14. Solvent welded pipe shall be "snaked" into trench to provide added length for soil expansion.
15. Open ends of pipe and fittings shall be blocked, covered or capped during installation to prevent entry of leaves, rodents, etc.
(i) Final Connection with Water Source
16. Water lines shall be connected with water source in accordance with all governing regulations.
(j) Wiring
17. A one foot diameter loop of the wire shall be made at the connection with each control valve.
18. All wire shall be banded together in the trench with electricians tape every eight to ten feet. Wire shall be snaked in the trench with a 12 inch diameter loop at intervals of 100 feet and at every change in direction to allow for contraction. Wire shall be laid adjacent to the water lines.
(k) Final Connection with Electric Service
19. Electric lines shall be connected to electric service in accordance with all governing regulations.
(I) Backfill
20. The first six inches of backfill shall be placed and thoroughly compacted by hand as not to disturb the lay of the pipe and wire. Backfilling shall continue in lifts of not more than 6 inches and thoroughly compacted to avoid future settlement of the trenched areas.
(m) System Testing
21. Contractor shall test the main line up-stream from control valves for constant water pressure. Line shall be tested for two hours at 100 p.s.i. Pressure may drop no more than two pounds during the test period.
22. Contractor shall test the lateral lines down-stream from control valves at available building system pressure for five hours. No water leakage shall occur.
(n) System Demonstration
23. Contractor shall instruct Owner's personnel in the operation and maintenance of system and adjustment of parts.
(o) Start-up
24. Contractor shall make final adjustments to insure complete coverage of the areas to be irrigated.
25. Contractor shall initiate the first sequencing of the system and instruct the assigned operating and maintenance personnel in the care and operation of the system.
26. Contractor shall drain the system at the end of the first season and reactivate the system the following season. Operation shall be coordinated with Owner's operating and maintenance personnel.

Basis of Payment: This work will be paid for at the contract unit price of lump sum for IRRIGATION SYSTEM which price shall include all equipment, materials, and labor to complete this work as specified and to the satisfaction of the Engineer.

## PORTLAND CEMENT CONCRETE PAVEMENT, 9" (SPECIAL):

Description: This work applies to colored and stamped concrete surfaces as well as nonstamped natural colored concrete located in the cross walks and islands within the street and consists of preparation of subbase, forming, placing and finishing concrete as shown in the plans and as directed by the Engineer.

Submittals:
(a) The following items shall be submitted and approved prior to operations: proposed concrete mix, color additive and stamp pattern.
(b) A test section of 5 sq.ft. per color will be provided for evaluation by the Engineer. Sections shall be prepared with integral color, stamped with release agent, and coated with antiskid agent and sealer. Additional test section(s) will be provided if needed to achieve the desired quality.
(c) The following items shall be submitted during operations; concrete load tickets and concrete sample test results.

Products:
(a) Concrete shall be Portland cement concrete in compliance with SI in accordance with Section 1020 of IDOT Standard Specifications.
(b) Concrete stamp forms shall be Brickform stamps as supplied by Solomon Colors, 4050 Color Plant Road, Springfield, IL 62702 (t) 800-624-0261, www.solomoncolors.com or approved equal.

1. Brick pattern shall be FM-5140 Running Bond New Brick $1 / 4$ inch Joints.
2. Stone pattern shall be FM-540 London Cobble.
(c) SGS Integral Color shall be fine ground pure mineral pigments, color as detailed in the plans for the area of application, specifically designed for coloring concrete as manufactured by Solomon Colors, 4050 Color Plant Road, Springfield, IL 62702 (t) 800-624-0261, www. solomoncolors.com or approved equal.
3. Color for Brick Running Bond pattern shall be Colony Red modified if necessary to match paving brick specified for the project.
4. Color for London Cobble pattern shall be Desert Tan modified if necessary to obtain color approved by Engineer.
(d) Color Release Agent, if applicable, shall be a dry hydrophobic powder and iron oxide coloring, color as detailed in the plans, specifically designed as a color release agent as manufactured by Solomon Colors, 4050 Color Plant Road, Springfield, IL 62702 (t) 800-624-0261, www.solomoncolors.com or approved equal.
(e) Concrete Sealer shall be according to Section 1026 Standard Specifications.
(f) Anti-Skid Agent shall be shall be compatible with selected Sealer.
(g) Stamp shall be as detailed in the plans and either a brick running bond using form "Running Bond New $1 / 4$ " Joints" (FM-5140) or rough cobble-like surface using form "London Cobble" (FM-540) manufactured by Solomon Colors, 4050 Color Plant Road, Springfield, IL 62702 (t) 800-624-0261, www.solomoncolors.com or approved equal.

Construction Requirements:
(a) Construction shall be in compliance with Section 424 Portland Cement Concrete Sidewalk and these specifications.
(b) Construction joints for all stamped concrete shall be saw cut as shown on plans. Cuts shall be made along stamped joint lines where possible.
(c) Construction joints for non-stamped concrete shall be hand tooled as shown on plan.
(d) Expansion joints shall be $1 / 2^{\prime \prime}$ thick, full depth, $1 / 4^{\prime \prime}$ from the surface with sealer to fill the void.
(e) Colored concrete shall be integrally and uniformly colored to achieve manufacturer's color guide.
(f) Concrete surface shall be stamped to provide full depth impression. Color release agent shall be used as detailed in the plans to achieve appearance to match the approved test section.
(g) Surface shall have antiskid agent and sealer applied.
(h) Finish Surface

1. All surfaces shall drain.
2. Tolerance. No greater than $1^{\prime \prime}$ in $10^{\prime}$ from lines and grades shown on plan.
(i) Upon completion, the contractor shall take particular care not to damage the pavement surface with other construction operations by covering the pavement with an appropriate protective cover material. Rollers, bituminous prime trucks, concrete trucks, and trucks carrying HMA will not be allowed to track over the pavement.

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Basis of Payment:
This work will be paid for at the contract unit price per square yard for PORTLAND CEMENT CONCRETE PAVEMENT, 9" (SPECIAL) which price shall include all equipment, materials, and labor, including base preparation, coloring, pouring and finishing/stamping, to complete this work as specified to the satisfaction of the Engineer.

## ORNAMENTAL STREET SIGN POST, COMPLETE:

Description: This work consists of furnishing and installing decorative cast aluminum sign poles, aluminum frames, and sign panels as specified in the plans and as directed by the Engineer.

Submittals: The following items shall be submitted and approved prior to operations; product cut sheets.

Warranty: For a period of two years following acceptance of project Contractor shall warranty against faulty installation and deterioration of sign frames. Decorative poles also shall have the manufacturer's 5 -year limited warranty.

Products:
(a) Posts shall be Birmingham style $77 / 0 T 5 / B C C / P G$ with a $4^{\prime \prime}$ ball center cap. Heights shall be 10 . Color shall be park green.
(b) Sign Frames shall be one-piece fully backed aluminum frames matching size and shape of signs.
(c) All posts, sign frames and signs shall be manufactured by Sternberg Lighting, 555 Lawrence Ave, Roselle, IL 60172, 847/588-3400, www.sternberglighting.com or an approved equal. All metal parts shall be park green.
(d) Concrete for footing shall be in accordance with Section 1020 Portland Cement Concrete, Type SI.
(e) Reinforcement shall be in accordance with Section 1006.10 Concrete Reinforcement Bars, Fabric, and Strand.
(f) Signs shall meet all applicable IDOT specifications and be installed in accordance with IDOT Highway Standard 720006 - Sign Panel Erection Details.

Construction Requirements:
(a) Posts shall be set on concrete bases using anchor bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.
(b) Poles shall be set using anchor bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.
(c) Any scuffing or surface marring shall be repaired to the satisfaction of the Owner.

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Basis of Payment:
This work will be paid for at the contract unit price per each for ORNAMENTAL STREET SIGN POST, COMPLETE which price shall include all equipment, materials, and labor, including frame, sign panel, and footing to complete this item as specified and to the satisfaction of the Engineer. Sign Panels will not be measured for payment separately but considered included in the cost of this item.

## TEMPORARY CONSTRUCTION FENCE:

This work shall consist of furnishing, erecting, moving and removing temporary fence and gates around designated staged work areas as shown in the plans and as directed by the Engineer. The fence shall consist of chain link panels in portable metal frames and be a minimum of $6^{\prime}$ in height. Panels shall be mechanically fastened together and ground braced to provide a secure continuous length. Gates for access to the work area of appropriate size will also be provided. Gate frames shall be composed of tubing with diagonal braces and filled with wire mesh. Location of gates shall be approved by the Engineer prior to the start of each Construction Stage.

Basis of Payment: This work shall be paid for at the contract unit price per foot for TEMPORARY CONSTRUCTION FENCE which price shall include all materials, labor, and equipment necessary to furnish, erect, move and remove temporary fence and gates to complete the work as specified herein to the satisfaction of the Engineer.

## SURFACE REMOVAL FOR UTILITY STAGING:

This work will consist of complete or partial pavement removal, sidewalk removal, and curb and gutter removal for the installation of conduit and/or cable by a utility company. The areas to be removed are shown in the plans and as directed by the Engineer. Removal in whole or in part may be necessary prior to the time indicated in the Traffic Control Plans to accommodate the utility extensions. Upon completion, the Contractor shall backfill the excavated area with trench backfill and cap with 8 " of aggregate base course. Trench backfill and aggregate base course shall be in accordance with Section 208 and 350 respectively.

The work as described herein will not be paid for separately, but considered included in the cost of item being removed. All work shall be completed to the satisfaction of the Engineer.

## FILLING VALVE VAULTS:

This work shall consist of abandoning existing water main valves and filling valve vaults in areas of existing pavement to be overlaid or removed as shown in the plans and as directed by the Engineer.

The work item shall include shutting off the valve and removal of any valve stem extension. The work of filling the existing vault shall be in accordance with Section 605 of the Standard Specifications. All work shall be to the satisfaction of the Engineer and the City of Jacksonville.

Basis of Payment: This work shall be paid for at the contract unit price per each for FILLING VALVE VAULTS, which price shall include all labor, equipment and material necessary to complete the work as specified herein and to the satisfaction of the Engineer.

## LIGHTS, GLOBES ON CONCRETE POLES:

Description: This work consists of furnishing and installing cast concrete poles and globe luminaries and making all electrical connections as shown in the plans and as directed by the Engineer.

Submittals: The following items shall be submitted and approved prior to operations; product cut sheets.

Warranty: For a period of two years following acceptance of project Contractor shall warranty against faulty installation and deterioration of bollards. Decorative poles also shall have the manufacturer's 5 -year limited warranty.

Products:
(a) Decorative Poles

1. Poles shall Wilmington series WM12E be cast concrete surface mount 13' high. The base shall be $21^{\prime \prime}$ in diameter and the pole tapered. Color shall be oriental jade.
2. Four hot dipped galvanized "L" type non-quick release anchor bolts shall be provided for each light pole.
3. A lockable GFI 2-outlet receptacle shall be mounted at the base of each pole.
(b) Fixture
4. Fixtures shall be Vintage Globe series 14, a slip-fit decorative white polycarbonate globe $14^{\prime \prime}$ in diameter.
5. Lamp shall be 100 watt metal halide.
6. Poles and fixtures shall be G16WA/5P/PT/70MH VND/PG/WM12' E/OJ/GFIK as manufactured by Sternberg Lighting, 555 Lawrence Ave, Roselle, IL 60172, (t) 847-588-3400, www.sternberglighting.com or approved equal.
(c) Concrete for footing shall be in accordance with Section 1020 Portland Cement Concrete, Type SI.

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(d) Reinforcement shall be in accordance with Section 1006.10 Concrete Reinforcement Bars, Fabric, and Strand.

Construction Requirements:
(a) Poles shall be set on concrete bases using anchor bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.
(b) Any scuffing or surface marring shall be repaired to the satisfaction of the Owner.

Basis of Payment:
This work will be paid for at the contract unit price per each for LIGHTS, GLOBE ON CONCRETE POLE which price shall include equipment, materials and labor including foundation to complete this item as specified to the satisfaction of the Engineer.

## LIGHTS, PEDESTRIAN:

Description: This work consists of furnishing and installing decorative cast aluminum poles, luminaries, and appurtenances as well as making all electrical connections as shown on the plans and as directed by the Engineer.

Submittals: The following items shall be submitted and approved prior to operations; product cut sheets.

Warranty: For a period of two years following acceptance of project Contractor shall warranty against faulty installation and deterioration of light fixtures. Decorative poles also shall have the manufacturer's 5 -year limited warranty.

Products:
(a) Poles shall be 12 -feet high cast aluminum alloy. The shaft shall be straight tapered. Four hot dipped galvanized "L" type non-quick release anchor bolts shall be provided for each light pole.
(b) Base shall be Birmingham 7700 cast aluminum alloy.
(c) A lockable GFI 2-outlet receptacle shall be mounted at the base of each pole.
(d) Flagpole holder shall be mounted on each pole.
(e) Fixture shall be Old Town A850SR, a decorative acorn light with metal cap. Shade shall be polycarbonate. The lamp shall be 100 watt metal halide.
(f) Poles, bases and fixtures shall be A850ASR/5P/PT/100MHVND/LO5S/7712T5/FH/GFIK/PG as manufactured by Sternberg Lighting, 555 Lawrence Ave, Roselle, IL 60172, 847/588-3400, www.sternberglighting.com. All metal parts shall be park green.
(g) Concrete for footing shall be in accordance with Section 1020 Portland Cement Concrete, Type SI.
(h) Reinforcement shall be in accordance with Section 1006.10 Concrete Reinforcement Bars, Fabric, and Strand.

Construction Requirements:
(a) Poles shall be set on concrete bases using anchor bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.
(b) Poles shall be set using anchor bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.
(c) Any scuffing or surface marring shall be repaired to the satisfaction of the Owner.

## Basis of Payment:

This work will be paid for at the contract unit price per each LIGHTS, PEDESTRIAN which price shall include equipment, materials and labor including foundation to complete this item as specified to the satisfaction of the Engineer.

## LIGHTS, STREET:

Description: This work consists of providing and installing decorative cast aluminum poles, clam shell bases, arms, caps, luminaries, and appurtenances as well as making all electrical connections as shown in the plans and as directed by the Engineer.

Submittals: The following items shall be submitted and approved prior to operations; product cut sheets.

Warranty: For a period of two years following acceptance of project Contractor shall warranty against faulty installation and deterioration of light fixtures. Decorative poles also shall have the manufacturer's 5 -year limited warranty.

Products:
(a) Poles shall be cast aluminum alloy. The shaft shall be 27' high, straight tapered from 8.6-4.68". Four hot dipped galvanized " $L$ " type non-quick release anchor bolts shall be provided for each light pole.
(b) A lockable GFI 2-outlet receptacle shall be mounted at the base of each pole.
(c) Banner arms shall be provided on each pole.
(d) The Clam Shell Base shall be Birmingham 7901SS, 54" high, base diameter 27".
(e) Roadway Arm shall be Model CBA, 8 ' long.
(f) Caps for poles shall be 4" dia. Ball Cap.
(g) Sign Brackets shall be provided for light poles as indicated in the plans.
(h) Fixture shall be Reno 1910/5LBS, a decorative down-light with a decorative cast aluminum fitter and cast ballast housing. The fixture shall be type 3 refractor. The lamp shall be 250 watt metal halide.
(i) Poles, bases and fixtures shall be 1-1930/5/LBS/CBA8(B)/9727 SRTS/BCC/250MH VND/RE3GSM/PG/GFIK/DBA as manufactured by Sternberg Lighting, 555 Lawrence Ave, Roselle, IL 60172, 847/588-3400, www.sternberglighting.com. All metal parts shall be park green.
(j) Concrete for footing shall be in accordance with Section 1020 Portland Cement Concrete, Type SI.
(k) Reinforcement shall be in accordance with Section 1006.10 Concrete Reinforcement Bars, Fabric, and Strand.

Construction Requirements:
(a) Poles shall be set on concrete bases using anchor bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.
(b) Poles shall be set using anchor bolts provided by manufacturer. Bolts shall be securely set in concrete with epoxy grout recommended by manufacturer.
(c) Any scuffing or surface marring shall be repaired to the satisfaction of the Owner.

Measurement: This work will be measured by the number of units installed.

## Payment:

This work will be paid for at the contract unit price per each LIGHTS, STREET which price shall include equipment, materials and labor including foundation to complete this item as specified to the satisfaction of the Engineer.

## TELESCOPING STEEL SIGN SUPPORT (SPECIAL):

This work shall consist of furnishing and installing telescoping steel sign supports for ground-mounted signs utilizing a telescoping base section as specified in Section 728 of the Standard Specifications, and as directed by the Engineer.

The steel pipe and the base shall be coated as specified below. Color of the coating shall be black. The coating shall be applied only after the steel pipe and base have been fabricated. The final product shall not contain cracks in the coating, ripples in the curved areas, nor any damage due to fabrication and or shipping.
(a) Steel shall be shot blast to near white steel and then an iron phosphate pre-treatment shall be applied.
(b) Primer shall be a thermosetting epoxy powder coating (Corvel Zinc Gray 13-7004 or approved equal) elestrostatically applied and cured six minutes at $250^{\circ} \mathrm{F}$. $\left(121^{\circ} \mathrm{C}\right.$.). The primer thickness shall be 1.8-10 mils ( $45-250$ $\mu \mathrm{m})$.

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(c) Topcoat shall be triglycidly isocyanurate (TGIC) polyester powder coating, electrostatically applied and cured in an oven for 20 minutes at $250^{\circ} \mathrm{F}$. $\left(121^{\circ} \mathrm{C}\right.$.). The total of all the coatings shall be $8-10$ mils $(200-250 \mu \mathrm{~m}) . \mathrm{S}$

This work shall be paid for per unit foot of Telescoping Steel Sign Support (Special) which price shall include all material, equipment and labor necessary to complete this work as specified to the satisfaction of the Engineer.

Storm Water Pollution Prevention Plan

| Route | Jacksonville Downtown Plaza Streets |
| :--- | :--- |
| Section | $05-00121-00-\mathrm{PV}$ |
| County | Morgan, City of Jacksonville |

Marked Rt.
Project No.
Contract No.
ARA-HPP-4097(005)

This plan has been prepared to comply with the provisions of the NPDES Permit Number ILR10, issued by the lllinois Environmental Protection Agency on May 30, 2003 for storm water discharges from Construction Site Activities. This plan has also been prepared to comply with the provisions of NPDES Permit Number ILR40 for discharges from small municipal separate storm sewer systems if checked below.

NPDES permits associated with this project:
【 ILR10 Permit No. (if applicable):
$\square \quad$ ILR40 Permit No. (if applicable):
$\qquad$

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


## I. Site Description:

A. The following is a description of the project location:

The project is located in Sections 20 and 21 within the City of Jacksonville. The intersections of Mauvaisterre, Sandy, Court, and Morgan Streets form the Downtown Central Park Plaza and are the limits of the project.
B. The following is a description of the construction activity which is the subject of this plan:

This project consists of reconstructing Mauvaisterre and Sandy Streets as well as the construction of Morgan and Court Streets to provide 86 ' wide face to face of curb streets. The existing hot-mix asphalt surface, sidewalk and curb and gutter will be removed. The new pavement construction will be 4-1/4" of hot-mix asphalt pavement over 4-1/2" of hot-mix asphalt base course and 4" aggregate sub-base. B-6. 12 combination curb and gutter will be provided throughout the project. Also included will be earth excavation, storm sewer, water main, sidewalk, landscaping, lighting and other related work.
C. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading:

1. Sidewalk Removal and Watermain Construction
2. Sidewalk Removal, earth excavation, storm sewer installation, and roadway improvements for Court and Morgan Streets
3. Sidewalk Removal, earth excavation, storm sewer installation and roadway improvements for Mauvaisterre and Sandy Streets.
4. Final grading, shaping, and landscaping for Central Park Plaza.
D. The total area of the construction site is estimated to be 6.0 acres.

The total area of the site that is estimated will be disturbed by excavation, grading or other activities is 6.0 acres.
E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:
$C=0.65$
F. The following is a description of the soil types found at the project site followed by information regarding their erosivity:

The soils within the project limits are silty clay loams on a relatively flat grade. Although highly erodible on steeper slopes, the flatter slopes within the project limits will limit erosion.
G. The following is a description of potentially erosive areas associated with this project:

The area that constitutes Central Park Plaza which is to be reconstructed is the largest erosive area within the project limits.
H. The following is a description of soil disturbing activities, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

Storm sewer/water main installation, earth excavation, landscaping and sidewalk construction over a 2.0 acre area of Central Park Plaza constitute the majority of existing soil disturbance.

1. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.
J. The following is a list of receiving water(s) and the ultimate receiving water(s), and areal extent of wetland acreage at the site. The location of the receiving waters can be found on the erosion and sediment control plans:

The receiving waters from storm water discharge is the Town Brook, and the ultimate receiving waters is Mauvaisterre Creek.
K. The following pollutants of concern will be associated with this construction project:

| $\boxtimes$ Soil Sediment | $\boxtimes$ | Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) |
| :--- | :--- | :--- |
| $\boxtimes$ Concrete | $\square$ | Antifreeze / Coolants |
| $\boxtimes$ Concrete Truck Waste | $\boxtimes$ | Waste water from cleaning construction equipment |
| $\boxtimes$ Concrete Curing Compounds | $\square$ | Other (specify) |
| $\square$ Solid Waste Debris | $\square$ | Other (specify) |
| $\square$ Paints | $\square$ | Other (specify) |
| $\square$ Solvents | $\square$ | Other (specify) |
| $\boxtimes$ Fertilizers / Pesticides | $\square$ | Other (specify) |

## II. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the contractor will be responsible for its implementation as indicated. The contractor shall provide to the resident engineer a plan for the implementation of the measures indicated. The contractor, and subcontractors, will notify the resident engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant
with the permit. Each such contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

## A. Erosion and Sediment Controls

1. Stabilized Practices: Provided below is a description of interim and permanent stabilization practices, including site specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in $\|(A)(1)(a)$ and $\|(A)(3)$, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of 21 or more calendar days.
a. Where the initiation of stabilization measures by the $14^{\text {th }}$ day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

The following Stabilization Practices will be used for this project:

| $\boxtimes$ | Preservation of Mature Vegetation | $\square$ |
| :--- | :--- | :--- |
| $\square$ Vegetated Buffer Strips | $\boxed{\text { Srosion Control Blanket / Mulching }}$ |  |
| Sodding |  |  |
| $\square$ | $\square$ | Geotextiles |
| Protection of Trees | $\square$ | Other (specify) |
| Temporary Erosion Control Seeding | $\square$ | Other (specify) |
| $\square$ Temporary Turf (Seeding, Class 7) | $\square$ | $\square$ |
| $\square$ Temporary Mulching | $\square$ | Other (specify |
| $\square$ Permanent Seeding |  | Othecify) |

Describe how the Stabilization Practices listed above will be utilized:
The entire project area will be subject to placement of Temporary Erosion Control Seeding as described in Article 280.04 of the Standard Specifications for Road and Brodge Construction. Upon completion of earthwork and related construction, the final sof will be placed in accordance with the project plans.
2. Structural Practices: Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following Structural Practices will be used for this project:

| $\boxtimes$ | Perimeter Erosion Barrier |
| :--- | :--- |
| $\square$ | Temporary Ditch Check |
| $\boxtimes$ | Storm Drain Inlet Protection |
| $\square$ Sediment Trap |  |
| $\square$ Temporary Pipe Slope Drain |  |
| $\square$ Temporary Sediment Basin |  |
| $\square$ Temporary Stream Crossing |  |
| $\square$ Stabilized Construction Exits |  |
| $\square$ Turf Reinforcement Mats |  |
| $\square$ Permanent Check Dams |  |
| $\square$ Permanent Sediment Basin |  |
| $\square$ Aggregate Ditch |  |
| $\square$ Paved Ditch |  |

Rock Outlet Protection
Riprap
Gabions
Slope Mattress
Retaining Walls
Slope Walls
Concrete Revetment Mats
Level Spreaders
Other (specify)
Other (specify)
Other (specify)
Other (specify)
Other (specify)

Describe how the Structural Practices listed above will be utilized:

1. Temporary erosion control systems shall be left in place with proper maintenance until permanent erosion control is in place and working properly and all proposed turf areas are sodded and established with a proper stand.
2. Once permanent erosion control systems as proposed in the plans are functional and established, temporary items shall be removed, cleaned up, and disturbed turf reseeded.
3. Storm Water Management: Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.
a. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Section 59-8 (Erosion and Sediment Control) in Chapter 59 (Landscape Design and Erosion Control) of the Illinois Department of Transportation Bureau of Design and Environment Manual. If practices other than those discussed in Section 59-8 are selected for implementation or if practices are applied to situations different from those covered in Section 59-8, the technical basis for such decisions will be explained below.
b. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls.
Upon installation of inlet grates, inlet filters will be used to prevent the discharge of sediment into storm sewers.

## 4. Other Controls:

a. Vehicle Entrances and Exits - Stabilized construction entrances and exits must be constructed to prevent tracking of sediments onto roadways.

The contractor will provide the resident engineer with a written plan identifying the location of stabilized entrances and exits and the procedures (s)he will use to construct and maintain them.
b. Material Delivery, Storage, and Use - The following BMPs shall be implemented to help prevent discharges of construction materials during delivery, storage, and use:

- All products delivered to the project site must be properly labeled.
- Water tight shipping containers and/or semi trailers shall be used to store hand tools, small parts, and most construction materials that can be carried by hand, such as paint cans, solvents, and grease.
- A storage/containment facility should be chosen for larger items such as drums and items shipped or stored on pallets. Such material is to be covered by a tin roof or large sheets of plastic to prevent precipitation from coming in contact with the products being stored.
- Large items such as light stands, framing materials and lumber shall be stored in the open in a general storage area. Such material shall be elevated with wood blocks to minimize contact with storm water runoff.
- Spill clean-up materials, material safety data sheets, an inventory of materials, and emergency contact numbers shall be maintained and stored in one designated area and each Contractor is to inform his/her employees and the resident engineer of this location.
c. Stockpile Management - BMPs shall be implemented to reduce or eliminate pollution of storm water from stockpiles of soil and paving materials such as but not limited to portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, aggregate sub base, and pre-mixed aggregate. The following BMPs may be considered:
- Perimeter Erosion Barrier
- Temporary Seeding
- Temporary Mulch
- Plastic Covers
- Soil Binders
- Storm Drain Inlet Protection

The contractor will provide the resident engineer with a written plan of the procedures (s)he will use on the project and how they will be maintained.
d. Waste Disposal. No materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.
e. The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.
f. The contractor shall provide a written and graphic plan to the resident engineer identifying where each of the above areas will be located and how they are to be managed.

## 5. Approved State or Local Laws

The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual, 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, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI , to be authorized to discharge under permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

N/A: All erosion control measures were taken in direct accordance with IDOT specifications and policy. No outside agencies have requested change to this Storm Water Pollution Prevention Plan in such a manner as to contradict IDOT policy.

## III. Maintenance:

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. The resident engineer will provide maintenance guides to the contractor for the practices associated with this project.

Al aspects of this Storm Water Pollution Prevention Plan will be completed and maintained in direct accordance with the procedures and methods set forth in the lllinois Department of Transportation "Standard Specifications for Road and Bridge Construction" except for those directly described in the contract special provisions.

## IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site. 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, use areas (storage of materials, stockpiles, machine maintenance, fueling, etc.), borrow sites, and waste sites 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. Discharge locations or points that are accessible, 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 I above and pollution prevention measures identified in section II 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 $1 / 2$ hour to 1 week based on the urgency of the situation. The resident engineer will notify the contractor of the time required to implement such actions through the weekly inspection report.
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 IV(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 shall complete and file an "Incidence of Noncompliance" (ION) report for the identified violation. The resident engineer 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 Incidence of Non-Compliance shall be mailed to the following address:

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

## V. 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.
A. Spill Prevention and Control - BMPs shall be implemented to contain and clean-up spills and prevent material discharges to the storm drain system. The contractor shall produce a written plan stating how his/her company will prevent, report, and clean up spills and provide a copy to all of his/her employees and the resident engineer. The contractor shall notify all of his/her employees on the proper protocol for reporting spills. The contractor shall notify the resident engineer of any spills immediately.
B. Concrete Residuals and Washout Wastes - The following BMPs shall be implemented to control residual concrete, concrete sediments, and rinse water:

- Temporary Concrete Washout Facilities shall be constructed for rinsing out concrete trucks. Signs shall be installed directing concrete truck drivers where designated washout facilities are located.
- The contractor shall have the location of temporary concrete washout facilities approved by the resident engineer.
- All temporary concrete washout facilities are to be inspected by the contractor after each use and all spills must be reported to the resident engineer and cleaned up immediately.
- Concrete waste solids/liquids shall be disposed of properly.
C. Litter Management - A proper number of dumpsters shall be provided on site to handle debris and litter associated with the project. The Contractor is responsible for ensuring his/her employees place all litter including marking paint cans, soda cans, food wrappers, wood lathe, marking ribbon, construction string, and all other construction related litter in the proper dumpsters.
D. Vehicle and Equipment Cleaning - Vehicles and equipment are to be cleaned in designated areas only, preferably off site.
E. Vehicle and Equipment Fueling - A variety of BMPs can be implemented during fueling of vehicles and equipment to prevent pollution. The contractor shall inform the resident engineer as to which BMPs will be used on the project. The contractor shall inform the resident engineer how (s)he will be informing his/her employees of these BMPs (i.e. signs, training, etc.). Below are a few examples of these BMPs:
- Containment
- Spill Prevention and Control
- Use of Drip Pans and Absorbents
- Automatic Shut-Off Nozzles
- Topping Off Restrictions
- Leak Inspection and Repair
F. Vehicle and Equipment Maintenance - On site maintenance must be performed in accordance with all environmental laws such as proper storage and no dumping of old engine oil or other fluids on site.


## VI. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of an Erosion and Sediment Control Deficiency Deduction against the contractor and/or penalties under the NPDES permit which could be passed onto the contractor.

The Resident Engineer is to make copies of this form and every contractor and sub-contractor will be required to complete their own separate form.

This certification statement is part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

| Route | Jacksonville Downtown Plaza Streets | Marked Rt. |  |
| :--- | :--- | :--- | :--- |
| Section | 05-00121-00-PV | Project No. | ARA-HPP-4097(005) |
| County | Morgan, City of Jacksonville | Contract No. |  |
|  |  |  |  |

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR 10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification. I have read and understand all of the information and requirements stated in the Storm Water Pollution Prevention Plan for the above mentioned project. I have provided all documentation required to be in compliance with the ILR10 and Storm Water Pollution Prevention Plan and will provide timely updates to these documents as necessary.
$\square$ Contractor
$\square$ Sub-Contractor

| Print Name |
| :---: |
| Nitle |
| Street Address of Firm |


| Signature |
| :--- |
| Date |
| Telephone |
| City/State/ZIP |

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

# SPECIAL PROVISION <br> FOR <br> COOPERATION WITH UTILITIES 

Effective: January 1, 1999
Revised: January 1, 2007
All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

Replace Article 105.07 of the Standard Specifications with the following:
"105.07 Cooperation with Utilities. The adjustment of utilities consists of the relocation, removal, replacement, rearrangements, reconstruction, improvement, disconnection, connection, shifting, new installation or altering of an existing utility facility in any manner.

When the plans or special provisions include information pertaining to the location of underground utility facilities, such information represents only the opinion of the Department as to the location of such utilities and is only included for the convenience of the bidder. The Department assumes no responsibility in respect to the sufficiency or the accuracy of the information shown on the plans relative to the location of the underground utility facilities.

Utilities which are to be adjusted shall be adjusted by the utility owner or the owner's representative or by the Contractor as a contract item. Generally, arrangements for adjusting existing utilities will be made by the Department prior to project construction; however, utilities will not necessarily be adjusted in advance of project construction and, in some cases, utilities will not be removed from the proposed construction limits. When utility adjustments must be performed in conjunction with construction, the utility adjustment work will be shown on the plans and/or covered by Special Provisions.

When the Contractor discovers a utility has not been adjusted by the owner or the owner's representative as indicated in the contract documents, or the utility is not shown on the plans or described in the Special Provisions as to be adjusted in conjunction with construction, the Contractor shall not interfere with said utility, and shall take proper precautions to prevent damage or interruption of the utility and shall promptly notify the Engineer of the nature and location of said utility.

All necessary adjustments, as determined by the Engineer, of utilities not shown on the plans or not identified by markers, will be made at no cost to the Contractor except traffic structures, light poles, etc., that are normally located within the proposed construction limits as hereinafter defined will not be adjusted unless required by the proposed improvement.
(a) Limits of Proposed Construction for Utilities Paralleling the Roadway. For the purpose of this Article, limits of proposed construction for utilities extending in the same longitudinal direction as the roadway, shall be defined as follows:
(1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 600 mm (2 $\mathrm{ft})$ distant at right angles from the plan or revised slope limits.

In cases where the limits of excavation for structures are not shown on the plans, the horizontal limits shall be a vertical plane $1.2 \mathrm{~m}(4 \mathrm{ft})$ outside the edges of structure footings or the structure where no footings are required.
(2) The upper vertical limits shall be the regulations governing the roadbed clearance for the specific utility involved.
(3) The lower vertical limits shall be the top of the utility at the depth below the proposed grade as prescribed by the governing agency or the limits of excavation, whichever is less.
(b) Limits of Proposed Construction for Utilities Crossing the Roadway. For the purpose of this Article, limits of proposed construction for utilities crossing the roadway in a generally transverse direction shall be defined as follows:
(1) Utilities crossing excavations for structures that are normally made by trenching such as sewers, underdrains, etc. and all minor structures such as manholes, inlets, foundations for signs, foundations for traffic signals, etc., the limits shall be the space to be occupied by the proposed permanent construction unless otherwise required by the regulations governing the specific utility involved.
(2) For utilities crossing the proposed site of major structures such as bridges, sign trusses, etc., the limits shall be as defined above for utilities extending in the same general direction as the roadway.

The Contractor may make arrangements for adjustment of utilities outside of the limits of proposed construction provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any adjustments made outside the limits of proposed construction shall be the responsibility of the Contractor unless otherwise provided.

The Contractor shall request all utility owners to field locate their facilities according to Article 107.31. The Engineer may make the request for location from the utility after receipt of notice from the Contractor. On request, the Engineer will make an inspection to verify that the utility company has field located its facilities, but will not assume responsibility for the accuracy of such work. The Contractor shall be responsible for maintaining the excavations or markers provided by the utility owners. This field location procedure may be waived if the utility owner has stated in writing to the Department it is satisfied the construction plans are sufficiently accurate. If the utility owner does not submit such statement to the Department, and they do not field locate their facilities in both horizontal and vertical alignment, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer, and be paid according to Article 109.04.

The Contractor shall coordinate with any planned utility adjustment or new installation and the Contractor shall take all precautions to prevent disturbance or damage to utility facilities. Any failure on the part of the utility owner, or their representative, to proceed with any planned utility adjustment or new installation shall be reported promptly by the Contractor to the Engineer orally and in writing.

The Contractor shall take all necessary precautions for the protection of the utility facilities. The Contractor shall be responsible for any damage or destruction of utility facilities resulting from neglect, misconduct, or omission in the Contractor's manner or method of execution or nonexecution of the work, or caused by defective work or the use of unsatisfactory materials. Whenever any damage or destruction of a utility facility occurs as a result of work performed by the Contractor, the utility company will be immediately notified. The utility company will make arrangements to restore such facility to a condition equal to that existing before any such damage or destruction was done.

It is understood and agreed that the Contractor has considered in the bid all of the permanent and temporary utilities in their present and/or adjusted positions.

No additional compensation will be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the said utility facilities or the operation of relocating the said utility facilities.

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets
SPECIAL PROVISION
FOR
INSURANCE
Effective: February 1, 2007
Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

City of Jacksonville

[^1]State of Illinois Department of Transportation Bureau of Local Roads and Streets

SPECIAL PROVISION FOR
CONSTRUCTION AND MAINTENANCE SIGNS

Effective: January 1, 2004
Revised: June 1, 2007

All references to Sections or Articles in this specification shall be construed to mean a specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.
701.14. Signs. Add the following paragraph to Article 701.14:

All warning signs shall have minimum dimensions of $1200 \mathrm{~mm} \times 1200 \mathrm{~mm}$ ( $48^{\prime \prime} \times 48$ ") and have a black legend on a fluorescent orange reflectorized background, meeting, as a minimum, Type AP reflectivity requirements of Table 1091-2 in Article 1091.02.

## AMERICAN RECOVERY AND REINVESTMENT ACT PROVISIONS (BDE)

Effective: April 1, 2009

## Required Contract Provision to Implement ARRA Section 902:

Section 902 of the American Recovery and Reinvestment Act (ARRA) of 2009 requires that each contract awarded using ARRA funds allow the U.S. Comptroller General and his representatives with the authority to:
"(1) to examine any records of the Contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and
(2) to interview any officer or employee of the Contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions."

Accordingly, the Comptroller General and his representatives shall have the authority and rights as provided under Section 902 of the ARRA with respect to this contract, which is funded with funds made available under the ARRA. Section 902 further states that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of the Comptroller General.

## Notification of the Authority of the Inspector General:

Section 1515(a) of the ARRA provides authority for any representatives of the Inspector General to examine any records or interview any employee or officers working on this contract. The Contractor is advised that representatives of the inspector general have the authority to examine any record and interview any employee or officer of the Contractor, its subcontractors or other firms working on this contract. Section 1515(b) further provides that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of an inspector general.

## AMERICAN RECOVERY AND REINVESTMENT ACT SIGNING (BDE)

Effective: April 1, 2009
Revised: April 15, 2009
Description. This work shall consist of furnishing, fabricating and installing sign panels, complete with sign faces, legend, and supplemental panels according to Section 720 of the Standard Specifications and as specified herein.

Materials. The "Putting America to Work" sign shall be fabricated using Type AA or AZ fluorescent orange sheeting for the background material with black vinyl or black opaque ink legend, symbol and borders. The "American Recovery and Reinvestment Act" sign shall be fabricated using Type AP green sheeting for the background with Type AP white sheeting for the legend and border. A green translucent overlay film may also be used over white Type AP sheeting to fabricate the "American Recovery and Reinvestment Act" sign.

Sign Layout. See following attachment. The "Putting America to Work" sign shall be $84 \mathrm{in} . \mathrm{x}$ 18 in. The "American Recovery and Reinvestment Act" sign shall be 84 in $\times 60$ in.

General. The signs shall be erected to applicable portions of Article 701.14 of the Standard Specifications. These signs shall be erected midway between the first and second warning signs as required by the traffic control plan and standards utilized for this project. If the second warning sign is defining a moving or intermittent operation, the sign may be maintained at a distance of $500 \mathrm{ft}(150 \mathrm{~m})$ beyond the first post mounted ROAD CONSTRUCTION AHEAD sign. The signs shall remain in place for the duration of the project. Upon completion of the project, the signs and posts shall be removed and shall remain the property of the Contractor.

Basis of Payment. This work will not be paid for separately but shall be included in the cost of Traffic Control items as shown on the plans.

## PROJECT FUNDING SOURGE SIGN ASSEMBLY AMERICAN RECOVERY AND REINVESTMENT ACT SIGN LAYOUT DETAILS



PROJECT FINDING SOURGE
SIGN ASSEMBLY

## PROJECT FUNDING SOURCE SIGN ASSEMBLY AMERICAN RECOVERY AND REINVESTMENT ACT SIGN LAYOUT DETAILS



NOTE: SIGN SHALL NOT BE INSTALIED WITHOUT
PBOEECT FIMDNG SOUREE FLAQUE

| A | B | G | D | E | F | G | H | 4 | K | L | M | N | P |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 120 | 84 | 1.5 | 6 | 50 | 4.5 | $8 \mathrm{D}^{*}$ | 375 | 60450 | 14.5 | 10 | 27.917 | 5 | 10.831 |
| 84 | 60 | 1 | 5 | 40 | 35 | $60^{*}$ | 3 | 40430 | 925 | 7 | 19.047 | 4 | 7862 |


| Q' | R | 5 | T | 1. | V. | W | $\chi$ | $\downarrow$ | 2 | AA. | BB | 6 C | DD: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14087 | 8.106 | 11:556; | 49.42: | 2742 | 5258: | 46.904 | 6.812 | 46.76 | 22.472 | 8 | 16:288 | 5 | 30 |
| 9484 | 5.162 | 7.763 | 31,722 | 2,415 | 3,535: | 30.552 | 4542 | $30.91{ }^{\circ}$ | 14.337 | 6 | 10.775 | 4 | 24 |


| $E E$ | $F F$ | $6 G$ |
| :---: | :---: | :---: |
| 11 | 4.5 | 3 |
| 7.5 | 225 | 2.25 |

$*$ licease ciaracier spacing $50 \%$
$* *$ See Piograph
$* *$ See Pictograph
COLORS: LEGEND, BOROER - WHITE (RETRORERECTIVE)
BAEKGROUND - GREEN RETROREFLECTVE

## PROJECT FUNDING SOURCE SIGN ASSEMBLY AMERICAN RECOVERY AND REINVESTMENT ACT SIGN LAYOUT DETAILS



NOTE PLAQUESHALI NOT BE WSTALIED Without sian

| jinengons indrehes |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | B | 0 | 0 | $E$ | F | G | H | 4 | $k$ | 1 | M | $N$ | $p$ |
| 180 | 24 | 0.625 | 0.875 | 4 | B. $\mathrm{D}^{\text {: }}$ | 22.349 | 20.370 | 17281 | 13.28: | 6 | 3422 | $6: 5$ | 88765 |
| 8.4 | 18 | 0.375 | 0.625: | 35 | 4 D | 16667. | 15.686 | 9.707 | 10667 | 4 | 28813 | 5 | 5.843 |


| 0 | $R$ | $S$ | $T$ | $U$ | $V$ | $W$ | $X$ | $v$ | $i$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21.013 | 3 | 24 | 0375 | 0.625 | 1.5 | 11 | 8 | 1.5 | 12 |
| 14009 | 225 | 18 | 0.375 | 0.625 | 1 | 7 | 6 | 1.5 | 0 |

# PROJECT FUNDING SOURCE SIGN ASSEMBLY AMERICAN RECOVERY AND REINVESTMENT ACT SIGN LAYOUT DETAILS 



COLORS: LEGEND, OUTLINE

- WHITE (RETROREFLECTIVE) BORDER - BLUE (RETROREFLECTVE) BAGKGRDUND (UPPER) - BLUE (RETROREFLECTIVE)
BACKGROLIND (LOWER RIGHT) - RED (RETROBEFLECTIVE) BACKGROUND (LOWER LEFT) - GREEN(RETROREFLEGTVE)


## PROJECT FUNDING SOURCE SIGN ASSEMBLY AMERICAN RECOVERY AND REINVESTMENT ACT SIGN LAYOUT DETAILS



## ALKALI-SILICA REACTION FOR PRECAST AND PRECAST PRESTRESSED CONCRETE (BDE)

Effective: January 1, 2009
Description. This special provision is intended to reduce the risk of a deleterious alkali-silica reaction in precast and precast prestressed 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 cast-in-place concrete.

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 $\left(\mathrm{Na}_{2} \mathrm{O}+0.658 \mathrm{~K}_{2} \mathrm{O}\right)$ 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 <br> or <br> Coarse Aggregate Blend | Fine Aggregate <br> or |  |  |
| ASTM C 1260 Expansion | Fine Aggregate Blend |  |  |
|  | ASTM C 1260 Expansion |  |  |
|  | $\leq 0.16 \%$ | $>0.16 \%-0.27 \%$ | $>0.27 \%$ |
|  | Group I | Group II | Group III |
| $>0.16 \%$ | Group II | Group II | Group III |
| $>0.16 \%-0.27 \%$ | 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.
a) Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used.

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

Weighted Expansion Value $=(a / 100 \times A)+(b / 100 \times B)+(c / 100 \times C)+\ldots$
Where: $a, b, c . . .=$ percentage of aggregate in the blend;
$A, B, C \ldots=$ 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 PC concrete, precast products, and PS concrete, 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 PC Concrete, precast products, and Class PS 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.
3) Ground Granulated Blast-Furnace Slag. For Class PC concrete, precast products, and Class PS concrete, ground granulated blast-furnace slag shall replace 25 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 $25 \mathrm{lb} / \mathrm{cu}$ yd ( $15 \mathrm{~kg} / \mathrm{cu} \mathrm{m}$ ) or $27 \mathrm{lb} / \mathrm{cu}$ yd ( $16 \mathrm{~kg} / \mathrm{cu} \mathrm{m}$ ) respectively.
c) Mixture Option 3. The cement used shall have a maximum total equivalent alkali content $\left(\mathrm{Na}_{2} \mathrm{O}+0.658 \mathrm{~K}_{2} \mathrm{O}\right)$ 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 $\left(\mathrm{Na}_{2} \mathrm{O}+0.658 \mathrm{~K}_{2} \mathrm{O}\right)$ 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. 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 $\left(\mathrm{Na}_{2} \mathrm{O}+0.658 \mathrm{~K}_{2} \mathrm{O}\right)$, 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 $\left(\mathrm{Na}_{2} \mathrm{O}+0.658 \mathrm{~K}_{2} \mathrm{O}\right)$ 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 either be accredited by the AASHTO Materials Reference Laboratory (AMRL) for ASTM C 227 under Portland Cement or Aggregate; or 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.

APPROVAL OF PROPOSED BORROW AREAS, USE AREAS, AND/OR WASTE AREAS INSIDE ILLINOIS STATE BORDERS (BDE)

Effective: November 1, 2008
Revise the title of Article 107.22 of the Standard Specifications to read:
"107.22 Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas Inside Illinois State Borders."

Add the following sentence to the end of the first paragraph of Article 107.22 of the Standard Specifications:
"Proposed borrow areas, use areas, and/or waste areas outside of Illinois shall comply with Article 107.01."

## CEMENT (BE)

Effective: January 1, 2007
Revised: April 1, 2009
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 ATM 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. The total of all inorganic processing additions shall be a maximum of 4.0 percent by weight (mass) of the cement. However, a cement kiln dust inorganic processing addition shall be limited to a maximum of 1.0 percent. 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, Class C fly ash according to the chemical requirements of AASHTO M 295, and cement kiln dust.
(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 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.

For cast-in-place construction, portland-pozzolan cement shall not be used in concrete mixtures when the air temperature is below $40^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right)$ 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 be limited to cement kiln dust at a maximum of 1.0 percent.
(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 IS portland blast-furnace slag cement may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. The blast-furnace slag constituent for Type IS shall be a maximum of 25 percent of the weight (mass) of the portland blast-furnace slag cement.

For cast-in-place construction, portland blast-furnace slag cement shall not be used in concrete mixtures when the air temperature is below $40^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right)$ 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 be limited to cement kiln dust at a maximum of 1.0 percent.
(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 $2000 \mathrm{psi}(13,800 \mathrm{kPa})$ at 3.0 hours, $3200 \mathrm{psi}(22,100 \mathrm{kPa})$ at 6.0 hours, and $4000 \mathrm{psi}(27,600 \mathrm{kPa})$ 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 AASHTO T 161, Procedure B.
(e) Calcium Aluminate Cement. Calcium aluminate cement shall be used only where 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 $\left(\mathrm{Al}_{2} \mathrm{O}_{3}\right)$, maximum 42 percent calcium oxide ( CaO ), maximum 1 percent magnesium oxide $(\mathrm{MgO})$, maximum 0.4 percent sulfur trioxide $\left(\mathrm{SO}_{3}\right)$, 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."

## CONCRETE ADMIXTURES (BDE)

Effective: January 1, 2003
Revised: April 1, 2009
Replace the first paragraph of Article 1020.05(b) of the Standard Specifications to read:
"(b) Admixtures. The use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted when approved by the Engineer. Admixture dosages shall result in the mixture meeting the specified plastic and hardened properties. The Department will maintain an Approved List of Corrosion Inhibitors. Corrosion inhibitor dosage rates shall be according to Article 1020.05(b)(12). The Department will also maintain an Approved List of Concrete Admixtures, and an admixture technical representative shall be consulted when determining an admixture dosage from this list. The dosage shall be within the range indicated on the approved list unless the influence by other admixtures, jobsite conditions (such as a very short haul time), or other circumstances warrant a dosage outside the range. The Engineer shall be notified when a dosage is proposed outside the range. To determine an admixture dosage, air temperature, concrete temperature, cement source and quantity, finely divided mineral sources(s) and quantity, influence of other admixtures, haul time, placement conditions, and other factors as appropriate shall be considered. The Engineer may request the Contractor to have a batch of concrete mixed in the lab or field to verify the admixture dosage is correct. An admixture dosage or combination of admixture dosages shall not delay the initial set of concrete by more than one hour. When a retarding admixture is required or appropriate for a bridge deck or bridge deck overylay pour, the initial set time shall be delayed until the deflections due to the concrete dead load are no longer a concern for inducing cracks in the completed work. However, a retarding admixture shall not be used to further extend the pour time and justify the alteration of a bridge deck pour sequence.

When determining water in admixtures for water/cement ratio, the Contractor shall calculate 70 percent of the admixture dosage as water, except a value of 50 percent shall be used for a latex admixture used in bridge deck latex concrete overlays."

Revise Section 1021 of the Standard Specifications to read:

## "SECTION 1021. CONCRETE ADMIXTURES

1021.01General. Admixtures shall be furnished in liquid form ready for use. The admixtures shall be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer and trade name of the material. Containers shall be readily identifiable as to manufacturer and trade name of the material they contain.

Corrosion inhibitors will be maintained on the Department's Approved List of Corrosion Inhibitors. All other concrete admixture products will be maintained on the Department's


Approved List of Concrete Admixtures. For the admixture submittal, a report prepared by an independent laboratory accredited by the AASHTO Materials Reference Laboratory (AMRL) for Portland Cement Concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, for corrosion inhibitors the ASTM G 109 test information specified in ASTM C 1582 is not required to be from and independent lab. All other information in ASTM C 1582 shall be from and independent lab.

Tests shall be conducted using materials and methods specified on a "test" concrete and a "reference" concrete, together with a certification that no changes have been made in the formulation of the material since the performance of the tests. Per the manufacturer's option, the cement content for all required tests shall either be according to applicable specifications or $5.65 \mathrm{cwt} / \mathrm{cu}$ yd ( $335 \mathrm{~kg} / \mathrm{cu} \mathrm{m}$ ). Compressive strength test results for six months and one year will not be required.

Prior to the approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of $5.65 \mathrm{cwt} / \mathrm{cu}$ yd ( $335 \mathrm{~kg} / \mathrm{cu} \mathrm{m}$ ). For freeze-thaw testing, the Department will perform the test according to AASHTO T 161, Procedure B. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The test and reference concrete mixture shall contain a cement content of $5.65 \mathrm{cwt} / \mathrm{cu}$ yd ( $335 \mathrm{~kg} / \mathrm{cu} \mathrm{m}$ ). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

The manufacturer shall include in the submittal the following admixture information: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and the manufacturing range for pH . The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM C 494. For residue by oven drying and pH , the allowable manufacturing range and test methods shall be according to ASTM C 260.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, and 1021.07, the pH allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to ASTM C 494.

When test results are more than seven years old, the manufacturer shall resubmit the infrared spectrophotometer trace and the report prepared by an independent laboratory accredited by AASHTO.

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass).

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material.
1021.02Air-Entraining Admixtures. Air-entraining admixtures shall be according to PASHTO M 154.
1021.03 Retarding and Water-Reducing Admixtures. The admixture shall be according to the following.
(a) The retarding admixture shall be according to AASHTO M 194, Type B (retarding) or Type $D$ (water-reducing and retarding).
(b) The water-reducing admixture shall be according to AASHTO M 194, Type A.
(c) The high range water-reducing admixture shall be according to AASHTO M 194, Type F (high range water-reducing) or Type $G$ (high range water-reducing and retarding).
1021.04Accelerating Admixtures. The admixture shall be according to AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating).
1021.05Self-Consolidating Admixtures. The self-consolidating admixture system shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete mixture that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

The high range water-reducing admixture shall be according to AASHTO M 194, Type F.
The viscosity modifying admixture shall be according to ASTM C 494, Type $S$ (specific performance).
1021.06Rheology-Controlling Admixture. The rheology-controlling admixture shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. The rheology-controlling admixture shall be according to ASTM C 494, Type S (specific performance).
1021.07 Corrosion Inhibitor. The corrosion inhibitor shall be according to one of the following.
(a) Calcium Nitrite. The corrosion inhibitor shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution, and shall comply with the requirements of AASHTO M 194, Type C (accelerating).
(b) Other Materials. The corrosion inhibitor shall be according to ASTM C $1582 .{ }^{\prime \prime}$

80094

# CONSTRUCTION AIR QUALITY - DIESEL VEHICLE EMISSIONS CONTROL (BDE) 

Effective: April 1, 2009
Revised: July 1, 2009
Diesel Vehicle Emissions Control. The reduction of construction air emissions shall be accomplished by using cleaner burning diesel fuel. The term "equipment" refers to any and all diesel fuel powered devices rated at 50 hp and above, to be used on the project site in excess of seven calendar days over the course of the construction period on the project site (including any "rental" equipment).

All equipment on the jobsite, with engine ratings of 50 hp and above, shall be required to: use Ultra Low Sulfur Diesel fuel (ULSD) exclusively ( 15 ppm sulfur content or less).

Diesel powered equipment in non-compliance will not be allowed to be used on the project site, and is also subject to a notice of non-compliance as outlined below.

The Contractor shall submit copies of monthly summary reports and include certified copies of the ULSD diesel fuel delivery slips for diesel fuel delivered to the jobsite for the reporting time period, noting the quantity of diesel fuel used.

If any diesel powered equipment is found to be in non-compliance with any portion of this specification, the Engineer will issue the Contractor a notice of non-compliance and identify an appropriate period of time, as outlined below under environmental deficiency deduction, in which to bring the equipment into compliance or remove it from the project site.

Any costs associated with bringing any diesel powered equipment into compliance with these diesel vehicle emissions controls shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall also not be grounds for a claim.

Environmental Deficiency Deduction. When the Engineer is notified, or determines that an environmental control deficiency exists, he/she will notify the Contractor in writing, and direct the Contractor to correct the deficiency within a specified time period. The specified time-period, which begins upon Contractor notification, will be from $1 / 2$ hour to 24 hours long, based on the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge regarding the time period.

The deficiency will be based on lack of repair, maintenance and diesel vehicle emissions control.

If the Contractor fails to correct the deficiency within the specified time frame, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar days) will begin when the time period for correction is exceeded and end
with the Engineer's written acceptance of the correction. The daily monetary deduction will be $\$ 1,000.00$ for each deficiency identified.

If a Contractor or subcontractor accumulates three environmental deficiency deductions in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of contract time, waiver of penalties, or be grounds for any claim.

80237

## CONSTRUCTION AIR QUALITY - IDLING RESTRICTIONS (EDE)

Effective: April 1, 2009
Idling Restrictions. The Contractor shall establish truck-staging areas for all diesel powered vehicles that are waiting to load or unload material at the jobsite. Staging areas shall be located where the diesel emissions from the equipment will have a minimum impact on adjacent sensitive receptors. The Department will review the selection of staging areas, whether within or outside the existing highway right-of-way, to avoid locations near sensitive areas or populations to the extent possible. Sensitive receptors include, but are not limited to, hospitals, schools, residences, motels, hotels, daycare facilities, elderly housing and convalescent facilities. Diesel powered engines shall also be located as far away as possible from fresh air intakes, air conditioners, and windows. The Engineer will approve staging areas before implementation.

Diesel powered vehicle operators may not cause or allow the motor vehicle, when it is not in motion, to idle for more than a total of 10 minutes within any 60 minute period, except under any of the following circumstances:

1) The motor vehicle has a gross vehicle weight rating of less than $8000 \mathrm{lb}(3630 \mathrm{~kg})$.
2) The motor vehicle idles while forced to remain motionless because of on-highway traffic, an official traffic control device or signal, or at the direction of a law enforcement official.
3) The motor vehicle idles when operating defrosters, heaters, air conditioners, or other equipment solely to prevent a safety or health emergency.
4) A police, fire, ambulance, public safety, other emergency or law enforcement motor vehicle, or any motor vehicle used in an emergency capacity, idles while in an emergency or training mode and not for the convenience of the vehicle operator.
5) The primary propulsion engine idles for maintenance, servicing, repairing, or diagnostic purposes if idling is necessary for such activity.
6) A motor vehicle idles as part of a government inspection to verify that all equipment is in good working order, provided idling is required as part of the inspection.
7) When idling of the motor vehicle is required to operate auxiliary equipment to accomplish the intended use of the vehicle (such as loading, unloading, mixing, or processing cargo; controlling cargo temperature; construction operations, lumbering operations; oil or gas well servicing; or farming operations), provided that this exemption does not apply when the vehicle is idling solely for cabin comfort or to operate non-essential equipment such as air conditioning, heating, microwave ovens, or televisions.
8) When the motor vehicle idles due to mechanical difficulties over which the operator has no control.
9) The outdoor temperature is less than $32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ or greater than $80^{\circ} \mathrm{F}\left(26^{\circ} \mathrm{C}\right)$.

When the outdoor temperature is greater than or equal to $32{ }^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ or less than or equal to $80^{\circ} \mathrm{F}\left(26^{\circ} \mathrm{C}\right)$, a person who operates a motor vehicle operating on diesel fuel shall not cause or allow the motor vehicle to idle for a period greater than 30 minutes in any 60 minute period while waiting to weigh, load, or unload cargo or freight, unless the vehicle is in a line of vehicles that regularly and periodically moves forward.

The above requirements do not prohibit the operation of an auxiliary power unit or generator set as an alternative to idling the main engine of a motor vehicle operating on diesel fuel.

Environmental Deficiency Deduction. When the Engineer is notified, or determines that an environmental control deficiency exists based on non-compliance with the idling restrictions, he/she will notify the Contractor, and direct the Contractor to correct the deficiency.

If the Contractor fails to correct the deficiency a monetary deduction will be imposed. The monetary deduction will be $\$ 1,000.00$ for each deficiency identified.

80239

## DETERMINATION OF THICKNESS (BDE)

Effective: April 1, 2009
Revise Articles 353.12 and 353.13 of the Standard Specifications to Articles 353.13 and 353.14 respectively.

Add the following Article to the Standard Specifications:
"353.12 Tolerance in Thickness. The thickness of base course pay items that individually contain at least 1000 sq yd ( 840 sq m ) of contiguous area, except for temporary construction, bike paths, and individual locations less than $500 \mathrm{ft}(150 \mathrm{~m})$ long, will be evaluated. Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness.

The procedure described in Article 407.10(b) will be followed, except the option of correcting deficient pavement with additional lift(s) shall not apply."

Revise Article 354.09 of the Standard Specifications to read:
"354.09 Tolerance in Thickness. The thickness of base course widening pay items that individually contain at least $1000 \mathrm{sq} y \mathrm{y}$ ( 840 sq m ) of contiguous area, except for temporary construction; bike paths and individual locations less than $3 \mathrm{ft}(1 \mathrm{~m})$ wide or 1000 ft ( 300 m ) long, will be evaluated. Temporary construction is defined as those areas constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course widening thickness.

The procedure described in Article 407.10(b) will be followed, except:
(a) The width of a unit shall be the width of the widening along one edge of the pavement.
(b) The length of the unit shall be $1000 \mathrm{ft}(300 \mathrm{~m})$.
(c) The option of correcting deficient pavement with additional lift(s) shall not apply."

Revise Article 355.09 of the Standard Specifications to read:
"355.09 Tolerance in Thickness. The thickness of HMA base course pay items that individually contain at least 1000 sq yd ( 840 sq m ) of contiguous area, except for temporary construction; bike paths and individual locations less than $500 \mathrm{ft}(150 \mathrm{~m})$ long, will be evaluated according to Article 407.10(b). Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to
placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness."

Revise Article 356.07 of the Standard Specifications to read:
"356.07 Tolerance in Thickness. The thickness of HMA base course widening pay items that individually contain at least 1000 sq yd ( 840 sq m ) of contiguous area, except for temporary construction; bike paths and individual locations less than $3 \mathrm{ft}(1 \mathrm{~m})$ wide or $1000 \mathrm{ft}(300 \mathrm{~m})$ long, will be evaluated according to Article 407.10 (b) except, the width of a unit shall be the width of the widening along one edge of the pavement and the length of a unit shall be 1000 ft $(300 \mathrm{~m})$. Temporary locations are defined as those constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s)and subtract them from the measured core thickness to determine the base course widening thickness."

Revise Article 407.10 of the Standard Specifications to read:
"407.10 Tolerance in Thickness. Determination of pavement thickness shall be performed after the pavement surface tests and corrective action have been completed according to Article 407.09. Pay adjustments made for pavement thickness will be in addition to and independent of those made for pavement smoothness. Pavement pay items that individually contain at least 1000 sq yd ( 840 sq m ) of contiguous pavement shall be evaluated with the following exclusions: temporary pavements; variable width pavements; radius returns; short lengths of contiguous pavements less than $500 \mathrm{ft}(125 \mathrm{~m})$ in length; and constant width portions of turn lanes less than $500 \mathrm{ft}(125 \mathrm{~m})$ in length. Temporary pavements are defined as pavements constructed and removed under the same contract.

The method described in Article 407.10(a), shall be used except for those pavements constructed in areas where access to side streets and entrances necessitates construction in segments less than $1000 \mathrm{ft}(300 \mathrm{~m})$. The method described in Article 407.10(b) shall be used in areas where access to side streets and entrances necessitates construction in segments less than $1000 \mathrm{ft}(300 \mathrm{~m})$.
(a) Percent Within Limits. The percent within limits (PWL) method shall be as follows.
(1) Lots and Sublots. The pavement will be divided into approximately equal lots of not more than $5000 \mathrm{ft}(1500 \mathrm{~m})$ in length. When the length of a continuous strip of pavement is $500 \mathrm{ft}(150 \mathrm{~m})$ or greater but_less than $5000 \mathrm{ft}(1500 \mathrm{~m})$, these short lengths of pavement, ramps, turn lanes, and other short sections of continuous pavement will be grouped together to form lots approximately $5000 \mathrm{ft}(1500 \mathrm{~m})$ in length. Short segments between structures will be measured continuously with the structure segments omitted. Each lot will be subdivided into ten equal sublots. The width of a sublot and lot will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.
(2) Cores. Cores 2 in . $(50 \mathrm{~mm})$ in diameter shall be taken from the pavement by the Contractor, at locations selected by the Engineer. The exact location for each core will be selected at random, but will result in one core per sublot. Core locations will be specified prior to beginning the coring operations.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the core lengths. The cores will be measured with a device supplied by the Department immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples shall be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.
(3) Deficient Sublot. When the length of the core in a sublot is deficient by more than ten percent of plan thickness, the Contractor may take three additional cores within that sublot at locations selected at random by the Engineer. If the Contractor chooses not to take additional cores, the pavement in that sublot shall be removed and replaced.

When the three additional cores are taken, the length of those cores will be averaged with the original core length. If the average shows the sublot to be deficient by ten percent or less, no additional action is necessary. If the average shows the sublot to be deficient by more than ten percent, the pavement in that sublot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient sublots to remain in place. For deficient sublots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient sublot is removed and replaced, or additional lifts are placed, the corrected sublot shall be retested for thickness. The length of the new core taken in the sublot will be used in determining the PWL for the lot.

When a deficient sublot is left in place, and no additional lift(s) are placed, no payment will be made for the deficient sublot. The length of the original core taken in the sublot will be used in determining the PWL for the lot.
(4) Deficient Lot. After addressing deficient sublots, the PWL for each lot will be determined. When the PWL of a lot is 60 percent or less, the pavement in that lot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient lots to remain in place.

For deficient lots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient lot is removed and replaced, or additional lifts are placed, the corrected lot shall be retested for thickness. The PWL for the lot will then be recalculated based upon the new cores; however, the pay factor for the lot shall be a maximum of 100 percent.

When a deficient lot is left in place, and no additional lift(s) are placed, the PWL for the lot will not be recalculated.
(5) Right of Discovery. When the Engineer has reason to believe the random core selection process will not accurately represent the true conditions of the work, he/she may order additional cores. The additional cores shall be taken at specific locations determined by the Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action. The need for, and location of, additional cores will be determined prior to commencement of coring operations.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, more additional cores shall be taken to determine the limits of the deficient pavement and that area shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient pavement to remain in place. The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the sublot. An acceptable core is a core with a length of at least 90 percent of plan thickness.

For deficient areas allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.

When an area of deficient pavement is left in place, and no additional lift(s) are placed, no payment will be made for the deficient pavement.

When the additional cores show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.
(6) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are placed, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness.
(7) Determination of PWL. The PWL for each lot will be determined as follows.

Definitions:
$x_{i} \quad=$ Individual values (core lengths) under consideration
$\mathrm{n}=$ Number of individual values under consideration (10 per lot)
$\bar{x}=$ Average of the values under consideration
LSL $=$ Lower Specification Limit (98\% of plan thickness)
$Q_{L}=$ Lower Quality Index
$S=$ Sample Standard Deviation
PWL = Percent Within Limits
Determine $\bar{x}$ for the lot to the nearest two decimal places.
Determine $S$ for the lot to the nearest three decimal places using:
$S=\sqrt{\frac{\Sigma\left(x_{1}-\bar{x}\right)^{2}}{n-1}}$ where $\quad \Sigma\left(x_{i}-\bar{x}\right)^{2}=\left(x_{1}-\bar{x}\right)^{2}+\left(x_{2}-\bar{x}\right)^{2}+\ldots \ldots . .\left(x_{10}-\bar{x}\right)^{2}$
Determine $Q_{L}$ for the lot to the nearest two decimal places using:
$Q_{L}=\frac{(\bar{x}-L S L)}{S}$
Determine PWL for the lot using the $Q_{L}$ and the following table. For $Q_{L}$ values less than zero the value shown in the table must be subtracted from 100 to obtain PWL.
(8) Pay Factors. The pay factor (PF) for each lot will be determined, to the nearest two decimal places, using:

PF (in percent) $=55+0.5(P W L)$
If $\bar{x}$ for a lot is less than the plan thickness, the maximum PF for that lot shall be 100 percent.
(9) Payment. Payment of incentive or disincentive for pay items subject to the PWL method will be calculated using:

Payment $=(((T P F / 100)-1) \times$ CUP $) \times($ TOTPAVT - DEFPAVT $)$
TPF $=$ Total Pay Factor

> CUP $=$ Contract Unit Price
> TOTPAVT $=$ Area of Pavement Subject to Coring DEFPAVT $=$ Area of Deficient Pavement

The TPF for the pavement shall be the average of the PF for all the lots; however, the TPF shall not exceed 102 percent.

Area of Deficient pavement (DEFPAVT) is defined as an area of pavement represented by a sublot deficient by more than ten percent which is left in place with no additional thickness added.

Area of Pavement Subject to Coring (TOTPAVT) is defined as those pavement areas included in lots for pavement thickness determination.

| PERCENT WITHIN LIMITS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent |  | Percent |  | Percent |  | Percent |
| Quality | Within | Quality | Within | Quality | Within | Quality | Within |
| Index | Limits | Index | Limits | Index | Limits | Index | Limits |
| $\left(Q_{L}\right)^{*}$ | (PWL) | $\left(Q_{L}\right)^{*}$ | (PWL) | $\left(\mathrm{Q}_{\mathrm{L}}\right)^{*}$ | (PWL) | $\left(Q_{L}\right)^{*}$ | (PWL) |
| 0.00 | 50.00 | 0.40 | 65.07 | 0.80 | 78.43 | 1.20 | 88.76 |
| 0.01 | 50.38 | 0.41 | 65.43 | 0.81 | 78.72 | 1.21 | 88.97 |
| 0.02 | 50.77 | 0.42 | 65.79 | 0.82 | 79.02 | 1.22 | 89.17 |
| 0.03 | 51.15 | 0.43 | 66.15 | 0.83 | 79.31 | 1.23 | 89.38 |
| 0.04 | 51.54 | 0.44 | 66.51 | 0.84 | 79.61 | 1.24 | 89.58 |
| 0.05 | 51.92 | 0.45 | 66.87 | 0.85 | 79.90 | 1.25 | 89.79 |
| 0.06 | 52.30 | 0.46 | 67.22 | 0.86 | 80.19 | 1.26 | 89.99 |
| 0.07 | 52.69 | 0.47 | 67.57 | 0.87 | 80.47 | 1.27 | 90.19 |
| 0.08 | 53.07 | 0.48 | 67.93 | 0.88 | 80.76 | 1.28 | 90.38 |
| 0.09 | 53.46 | 0.49 | 68.28 | 0.89 | 81.04 | 1.29 | 90.58 |
| 0.10 | 53.84 | 0.50 | 68.63 | 0.90 | 81.33 | 1.30 | 90.78 |
| 0.11 | 54.22 | 0.51 | 68.98 | 0.91 | 81.61 | 1.31 | 90.96 |
| 0.12 | 54.60 | 0.52 | 69.32 | 0.92 | 81.88 | 1.32 | 91.15 |
| 0.13 | 54.99 | 0.53 | 69.67 | 0.93 | 82.16 | 1.33 | 91.33 |
| 0.14 | 55.37 | 0.54 | 70.01 | 0.94 | 82.43 | 1.34 | 91.52 |
| 0.15 | 55.75 | 0.55 | 70.36 | 0.95 | 82.71 | 1.35 | 91.70 |
| 0.16 | 56.13 | 0.56 | 70.70 | 0.96 | 82.97 | 1.36 | 91.87 |
| 0.17 | 56.51 | 0.57 | 71.04 | 0.97 | 83.24 | 1.37 | 92.04 |
| 0.18 | 56.89 | 0.58 | 71.38 | 0.98 | 83.50 | 1.38 | 92.22 |
| 0.19 | 57.27 | 0.59 | 71.72 | 0.99 | 83.77 | 1.39 | 92.39 |
| 0.20 | 57.65 | 0.60 | 72.06 | 1.00 | 84.03 | 1.40 | 92.56 |
| 0.21 | 58.03 | 0.61 | 72.39 | 1.01 | 84.28 | 1.41 | 92.72 |
| 0.22 | 58.40 | 0.62 | 72.72 | 1.02 | 84.53 | 1.42 | 92.88 |
| 0.23 | 58.78 | 0.63 | 73.06 | 1.03 | 84.79 | 1.43 | 93.05 |
| 0.24 | 59.15 | 0.64 | 73.39 | 1.04 | 85.04 | 1.44 | 93.21 |
| 0.25 | 59.53 | 0.65 | 73.72 | 1.05 | 85.29 | 1.45 | 93.37 |
| 0.26 | 59.90 | 0.66 | 74.04 | 1.06 | 85.53 | 1.46 | 93.52 |
| 0.27 | 60.28 | 0.67 | 74.36 | 1.07 | 85.77 | 1.47 | 93.67 |
| 0.28 | 60.65 | 0.68 | 74.69 | 1.08 | 86.02 | 1.48 | 93.83 |
| 0.29 | 61.03 | 0.69 | 75.01 | 1.09 | 86.26 | 1.49 | 93.98 |
| 0.30 | 61.40 | 0.70 | 75.33 | 1.10 | 86.50 | 1.50 | 94.13 |
| 0.31 | 61.77 | 0.71 | 75.64 | 1.11 | 86.73 | 1.51 | 94.27 |
| 0.32 | 62.14 | 0.72 | 75.96 | 1.12 | 86.96 | 1.52 | 94.41 |
| 0.33 | 62.51 | 0.73 | 76.27 | 1.13 | 87.20 | 1.53 | 94.54 |
| 0.34 | 62.88 | 0.74 | 76.59 | 1.14 | 87.43 | 1.54 | 94.68 |
| 0.35 | 63.25 | 0.75 | 76.90 | 1.15 | 87.66 | 1.55 | 94.82 |
| 0.36 | 63.61 | 0.76 | 77.21 | 1.16 | 87.88 | 1.56 | 94.95 |
| 0.37 | 63.98 | 0.77 | 77.51 | 1.17 | 88.10 | 1.57 | 95.08 |
| 0.38 | 64.34 | 0.78 | 77.82 | 1.18 | 88.32 | 1.58 | 95.20 |
| 0.39 | 64.71 | 0.79 | 78.12 | 1.19 | 88.54 | 1.59 | 95.33 |

*For $Q_{L}$ values less than zero, subtract the table value from 100 to obtain PWL

*For $Q_{L}$ values less than zero, subtract the table value from 100 to obtain PWL

(b) Minimum Thickness. The minimum thickness method shall be as follows.
(1) Length of Units. The length of a unit will be a continuous strip of pavement 500 ft ( 150 m ) in length.
(2) Width of Units. The width of a unit will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.
(3) Thickness Measurements. Pavement thickness will be based on 2 in . ( 50 mm ) diameter cores.

Cores shall be taken from the pavement by the Contractor at locations selected by the Engineer. When determining the thickness of a unit, one core shall be taken in each unit.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the cores. Core measurements will be determined immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples may be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.
(4) Unit Deficient in Thickness. In considering any portion of the pavement that is deficient, the entire limits of the unit will be used in computing the deficiency or determining the remedial action required.
(5) Thickness Equals or Exceeds Specified Thickness. When the thickness of a unit equals or exceeds the specified plan thickness, payment will be made at the contract unit price per square yard (square meter) for the specified thickness.
(6) Thickness Deficient by Ten Percent or Less. When the thickness of a unit is less than the specified plan thickness by ten percent or less, a deficiency deduction will be assessed against payment for the item involved. The deficiency will be a percentage of the contract unit price as given in the following table.

| Percent Deficiency <br> (of Plan Thickness) | Percent Deduction <br> (of Contract Unit Price) |
| :---: | :---: |
| 0.0 to 2.0 | 0 |
| 2.1 to 3.0 | 20 |
| 3.1 t 4.0 | 28 |
| 4.1 t 5.0 | 32 |
| 5.1 to 7.5 | 43 |
| 7.6 to 10.0 | 50 |

(7) Thickness Deficient by More than Ten Percent. When a core shows the pavement to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient pavement. No core shall be located within $5 \mathrm{ft}(1.5 \mathrm{~m})$ of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient pavement. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient pavement shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient pavement to remain in place. For deficient areas allowed to remain in place, additional lifts) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lifts). The areas) to be overlaid, material to be used, thicknesses) of the lifts), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness. The thickness of the new core will be used to determine the pay factor for the corrected area.

When an area of deficient pavement is left in place, and no additional lifts) are placed, no payment will be made for the deficient pavement. In addition, an amount equal to two times the contract cost of the deficient pavement will be deducted from the compensation due the Contractor.

The thickness of the first acceptable core on each side of the core more than ten percent deficient will be used to determine any needed pay adjustments for the remaining areas on each side of the area deficient by more than ten percent. The pay adjustment will be determined according to Article 407.10(b)(6).
(8) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. These additional cores shall be taken at specific locations determined by the

Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, the procedures outlined in Article 407.10(b)(7) shall be followed, except the Engineer will determine the additional core locations.

When the additional cores, ordered by the Engineer, show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.
(9) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are added, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness."

Revise Article 482.06 of the Standard Specifications to read:
"482.06 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. When the contract includes square yards (square meters) as the unit of measurement for HMA shoulder, thickness determinations shall be made according to Article 407.10(b)(3) and the following.
(a) Length of the Units. The length of a unit shall be a continuous strip of shoulder 2500 ft ( 750 m ) long.
(b) Width of the Units. The width of the unit shall be the full width of the shoulder.
(c) Thickness Deficient by More than Ten Percent. When a core shows the shoulder to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient shoulder. No core shall be located within $5 \mathrm{ft}(1.5 \mathrm{~m})$ of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient shoulder. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient shoulder will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient shoulder shall be brought to specified thickness by the addition of the applicable mixture, at no additional cost to the Department and subject to the lift thickness requirements of Article 312.05, or by removal and replacement with a new mixture. However, the surface elevation of the completed shoulder shall not exceed by more than $1 / 8 \mathrm{in}$. ( 3 mm ) the surface elevation of the adjacent pavement. When requested in writing by the Contractor, the Engineer may permit in writing such thin shoulder to remain in place. When an area of thin shoulder is left in place, and no additional lifts) are placed, no payment will be made for the thin shoulder. In addition,

an amount equal to two times the contract unit price of the shoulder will be deducted from the compensation due the Contractor.

When an area of deficient shoulder is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.
(d) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. When the additional cores, ordered by the Engineer, show the shoulder to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04. When the additional core shows the shoulder to be less than 90 percent of plan thickness, the procedure in (c), above shall be followed."

Revise Article 483.07 of the Standard Specifications to read:
"483.07 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. Thickness determinations shall be made according to Article 482.06 except the option of correcting deficient pavement with additional lift(s) shall not apply."

## DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000
Revised: January 1, 2010
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.

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 ___10___\% of the work. This percentage is set as the DBE participation
goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:
(a) The bidder documents that enough DBE participation has been obtained to meet the goal; or
(b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders 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.

BIDDING PROCEDURES. Compliance with this Special Provision is a material bidding requirement. The failure of the bidder to comply will render the bid not responsive.
(a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
(b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
(c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
(1) The names and addresses of DBE firms that will participate in the contract;
(2) A description, including pay item numbers, of the work each DBE will perform;
(3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial
pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
(4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
(5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
(6) If the contract goal is not met, evidence of good faith efforts.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document the good faith efforts of the bidder before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan commits sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not commit sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere pro forma efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.
(a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
(1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
(2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to
facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
(3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
(4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.
(5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
(6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
(7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
(8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
(b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this

Special Provision and that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons why good faith efforts have not been found.
(c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. 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.

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 contact. Credit will be given for the following:
(1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
(2) The DBE may also lease trucks from a non-DBE firm, including from an owneroperator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.
(e) DBE as a material supplier:
(1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
(2) 100 percent goal credit for the cost of materials 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.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal.
(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) The Contractor must notify and obtain written approval from the Department's Bureau of Small Business Enterprises prior to replacing a DBE or making any change in the participation of a DBE. Approval for replacement will be granted only if it is demonstrated that the DBE is unable or unwilling to perform. The Contractor must make every good faith effort to find another certified DBE subcontractor to substitute for the original 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 original DBE, to the extent needed to meet the contract goal.
(c) Any deviation from the DBE condition-of-award or contract specifications must be approved, in writing, by the Department. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract.
(d) In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
(1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
(2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
(3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonably competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
(e) Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted.
(f) If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
(g) 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. 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.
(h) 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 Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (j) of this part.
(i) 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.
(j) 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.

DOWEL BARS (EDE)
Effective: April 1, 2007
Revised: January 1, 2008
Revise the fifth and sixth sentences of Article 1006.11(b) of the Standard Specifications to read:
"The bars shall be epoxy coated according to AASHTO M 284, except the thickness of the epoxy shall be 7 to 12 mils ( 0.18 to 0.30 mm ) and patching of the ends will not be required. 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."

80178

## EQUIPMENT RENTAL RATES (EDE)

Effective: August 2, 2007
Revised: January 2, 2008

Replace the second and third paragraphs of Article 105.07(b)(4)a. of the Standard Specifications with the following:
"Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4)."

Replace Article 109.04(b)(4) of the Standard Specifications with the following:
"(4) Equipment. Equipment used for extra work shall be authorized by the Engineer. The equipment shall be specifically described, be of suitable size and capacity for the work to be performed, and be in good operating condition. For such equipment, the Contractor will be paid as follows.
a. Contractor Owned Equipment. Contractor owned equipment will be paid for by the hour using the applicable FHWA hourly rate from the "Equipment Watch Rental Rate Blue Book" (Blue Book) in effect when the force account work begins. The FHWA hourly rate is calculated as follows.

FHWA hourly rate $=($ monthly rate $/ 176) \times($ model year adj.$) \times($ Illinois adj. $)+$ EOS
Where: EOC = Estimated Operating Costs per hour (from the Blue Book)
The time allowed will be the actual time the equipment is operating on the extra work. For the time required to move the equipment to and from the site of the extra work and any authorized idle (standby) time, payment will be made at the following hourly rate: $0.5 \times$ (FHWA hourly rate -EOC ).

All time allowed shall fall within the working hours authorized for the extra work.
The rates above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals. The rates do not include labor.

The Contractor shall submit to the Engineer sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper equipment category. If a rate is not established in the Blue Book for a particular piece of equipment, the Engineer will establish a rate for that piece of equipment that is consistent with its cost and use in the industry.
b. Rented Equipment. Whenever it is necessary for the Contractor to rent equipment to perform extra work, the rental and transportation costs of the equipment plus five percent for overhead will be paid. In no case shall the rental rates exceed those of established distributors or equipment rental agencies.

All prices shall be agreed to in writing before the equipment is used."

## HOT-MIX ASPHALT - ANTI-STRIPPING ADDITIVE (BDE)

Effective: November 1, 2009
Revise the first and second paragraphs of Article 1030.04(c) of the Standard Specifications to read:
"(c) Determination of Need for Anti-Stripping Additive. The mixture designer shall determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to llilinois Modified AASHTO T 283. To be considered acceptable by the Department as a mixture not susceptible to stripping, the conditioned to unconditioned split tensile strength ratio (TSR) shall be equal to or greater than 0.85 for 6 in . ( 150 mm ) specimens. Mixtures, either with or without an additive, with TSRs less than 0.85 for 6 in . ( 150 mm ) specimens will be considered unacceptable. Also, the conditioned tensile strength for mixtures containing an anti-strip additive shall not be lower than the original conditioned tensile strength determined for the same mixture without the anti-strip additive.

If it is determined that an additive is required, the additive may be hydrated lime, slaked quicklime, or a liquid additive, at the Contractor's option."

## HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BE)

Effective: January 1, 2010
Description. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:
"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 2 in . $(50 \mathrm{~mm})$, from each pavement edge. (i.e. for a 4 in . $(100 \mathrm{~mm})$ lift the near edge of the density gauge or core barrel shall be within 4 in . ( 100 mm ) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.
a. Confined Edge. Each confined edge density shall be represented by a oneminute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced ten feet apart longitudinally along the unconfined pavement edge and centered at the random density test location."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

| "Mixture Composition | Parameter | Individual Test <br> (includes confined edges) | Unconfined Edge <br> Joint Density <br> Minimum |
| :--- | :---: | :---: | :---: |
| IL-9.5, IL-12.5 | Ndesign $\geq 90$ | $92.0-96.0 \%$ | $90.0 \%$ |
| IL-9.5,IL-9.5L, <br> IL-12.5 | Ndesign <90 | $92.5-97.4 \%$ | $90.0 \%$ |
| IL-19.0, IL-25.0 | Ndesign $\geq 90$ | $93.0-96.0 \%$ | $90.0 \%$ |
| IL-19.0, LL-19.0L, <br> IL-25.0 | Ndesign $<90$ | $93.0-97.4 \%$ | $90.0 \%$ |
| SMA | Ndesign $=50 \& 80$ | $93.5-97.4 \%$ | $91.0 \%$ |
| All Other | Ndesign $=30$ | $93.0-97.4 \%$ | $90.0 \%$ " |

## HOT-MIX ASPHALT - DROP-OFFS (BE)

Effective: January 1, 2010
Revise the third paragraph of Article 701.07 . of the Standard Specifications to read:
"At locations where construction operations result in a differential in elevation exceeding 3 in. $(75 \mathrm{~mm})$ between the edge of pavement or edge of shoulder within $3 \mathrm{ft}(900 \mathrm{~mm})$ of the edge of the pavement and the earth or aggregate shoulders, Type I or II barricades or vertical panels shall be placed at $100 \mathrm{ft}(30 \mathrm{~m})$ centers on roadways where the posted speed limit is 45 mph or greater and at $50 \mathrm{ft}(15 \mathrm{~m})$ centers on roadways where the posted speed limit is less than 45 mph."

## HOT-MIX ASPHALT - PLANT TEST FREQUENCY (EDE)

Effective: April 1, 2008
Revised: January 1, 2010
Revise the table in Article 1030.05(d)(2)a. of the Standard Specifications to read:



Note 1. The No. $8(2.36 \mathrm{~mm})$ and No. $30(600 \mu \mathrm{~m})$ sieves are not required for All Other Mixtures.

Note 2. The Engineer may waive the ignition oven requirement for asphalt binder content if the aggregates to be used are known to have ignition asphalt binder content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the asphalt binder content.

Note 3. The $\mathrm{G}_{\mathrm{sb}}$ used in the voids in the mineral aggregate (VMA) calculation shall be the same average $\mathrm{G}_{\mathrm{sb}}$ value listed in the mix design.

Note 4. The Engineer reserves the right to require additional hot bin gradations for batch plants if control problems are evident."

HOT-MIX ASPHALT - QC/QA ACCEPTANCE CRITERIA (BE)
Effective: January 1, 2010
Revise Article 1030.05(f)(3) of the Standard Specifications to read:
"(3) Department assurance tests for voids, field VMA, and density."

80251

123

## HOT-MIX ASPHALT - TRANSPORTATION (BE)

Effective: April 1, 2008
Revise Article 1030.08 of the Standard Specifications to read:
"1030.08 Transportation. Vehicles used in transporting HMA shall have clean and tight beds. The beds shall be sprayed with asphalt release agents from the Department's approved list. In lieu of a release agent, the Contractor may use a light spray of water with a light scatter of manufactured sand (FA 20 or FA 21) evenly distributed over the bed of the vehicle. After spraying, the bed of the vehicle shall be in a completely raised position and it shall remain in this position until all excess asphalt release agent or water has been drained.

When the air temperature is below $60^{\circ} \mathrm{F}\left(15^{\circ} \mathrm{C}\right)$, the bed, including the end, endgate, sides and bottom shall be insulated with fiberboard, plywood or other approved insulating material and shall have a thickness of not less than $3 / 4 \mathrm{in}(20 \mathrm{~mm})$. When the insulation is placed inside the bed, the insulation shall be covered with sheet steel approved by the Engineer. Each vehicle shall be equipped with a cover of canvas or other suitable material meeting the approval of the Engineer which shall be used if any one of the following conditions is present.
(a) Ambient air temperature is below $60^{\circ} \mathrm{F}\left(15^{\circ} \mathrm{C}\right)$.
(b) The weather is inclement.
(c) The temperature of the HMA immediately behind the aver screed is below $250^{\circ} \mathrm{F}$ ( $120^{\circ} \mathrm{C}$ ).

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

## LIQUIDATED DAMAGES (BE)

Effective: April 1, 2009
Revise the table in Article 108.09 of the Standard Specifications to read:


80230

## METAL HARDWARE CAST INTO CONCRETE (BDE)

Effective: April 1, 2008
Revised: April 1, 2009
Add the following to Article 503.02 of the Standard Specifications:
" (g) Metal Hardware Cast into Concrete....................................................................1006.13"
Add the following to Article 504.02 of the Standard Specifications:
"(j) Metal Hardware Cast into Concrete....................................................................1006.13"
Revise Article 1006.13 of the Standard Specifications to read:
| "1006.13 Metal Hardware Cast into Concrete. Unless otherwise noted, all steel hardware cast into concrete, such as inserts, brackets, cable clamps, metal casings for formed holes, and other miscellaneous items, shall be galvanized according to AASHTO M 232 or AASHTO M 111. Aluminum inserts will not be allowed. Zinc alloy inserts shall be according to ASTM B 86, Alloys 3,5 , or 7 .
| The inserts shall be UNC threaded type anchorages having the following minimum certified proof load.

| Insert Diameter | Proof Load |
| :--- | :---: |
| $5 / 8 \mathrm{in} .(16 \mathrm{~mm})$ | $6600 \mathrm{lb}(29.4 \mathrm{kN})$ |
| $3 / 4 \mathrm{in} .(19 \mathrm{~mm})$ | $6600 \mathrm{lb}(29.4 \mathrm{kN})$ |
| $1 \mathrm{in} .(25 \mathrm{~mm})$ | $9240 \mathrm{lb}(41.1 \mathrm{kN})^{\prime \prime}$ |

80203

## MONTHLY EMPLOYMENT REPORT (BDE)

Effective: April 1, 2009
In addition to any other reporting required by the contract, the Contractor shall provide to the Engineer an employment summary for all employees working on the contract from the contract execution date to the last full pay period each month for the duration of the contract. The report may include but is not limited to:
a) A listing of the total number of employees.
b) The employee job classification.
c) The total hours worked and payroll for each employee.

The report shall be completed by the Contractor and each subcontractor. Employee hours worked from home office or other off-site office hours worked related directly to this contract shall be included. Engineering consulting firms performing construction layout and material testing for the Contractor shall also be included.

Hours worked for material suppliers, services provided by purchase orders, Department employees or consulting firms performing inspection or testing for the Department shall not be included in the report.

The report shall contain all hours worked under the contract from the start of the month to the last full pay period each month and shall be submitted no later than 10 business days after the end of each month.

The report shall be submitted electronically in a format determined by the Engineer. See attachment for potential reporting format.

Any costs associated with complying with this provision shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

## Attachment



# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM / EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE) 

Effective: April 1, 2007
Revised: November 1, 2009
Revise Article 105.03(a) of the Standard Specifications to read:
"(a) National Pollutant Discharge Elimination System (NPDES) / Erosion and Sediment Control Deficiency Deduction. When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, or the Contractor's activities represents a violation of the Department's NPDES permits, the Engineer 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 work effort required. 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 Department's NPDES permits. 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 portion of a calendar day until the deficiency is corrected to the satisfaction of the Engineer. The calendar days) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The base value of the daily monetary deduction is $\$ 1000.00$ and will be applied to each location for which a deficiency exists. The value of the deficiency deduction assessed for each infraction will be determined by multiplying the base value by a Gravity Adjustment Factor provided in Table A. Except for failure to participate in a required jobsite inspection of the project prior to initiating earthmoving operations which will be based on the total acreage of planned disturbance at the following multipliers: $<5$ Acres: 1; 5-10 Acres: $2 ;>10-25$ Acres: $3 ;>25$ Acres: 5 . For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day multiplied by a Gravity Adjustment Factor.

| Table ADeficiency Deduction Gravity Adjustment Factors |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Types of Violations | Soil Disturbed and Not Permanently Stabilized At Time of Violation |  |  |  |
|  | $<5$ Acres | $\begin{aligned} & 5-10 \\ & \text { Acres } \end{aligned}$ | $\begin{gathered} >10-25 \\ \text { Acres } \end{gathered}$ | $>25$ <br> Acres |
| Failure to Install or Properly Maintain BMP | 0.1-0.5 | 0.2-1.0 | 0.5-2.5 | 1.0-5 |
| Careless Destruction of BMP | 0.2-1 | 0.5-2.5 | 1.0-5. | 1.0-5 |
| Intrusion into Protected Resource | 1.0-5 | 1.0-5 | 2.0-10 | 2.0-10 |
| Failure to properly manage Chemicals, Concrete Washouts or Residuals, Litter or other Wastes | 0.2-1 | 0.2-1 | 0.5-2.5 | 1.0-5 |
| Improper Vehicle and Equipment Maintenance, Fueling or Cleaning | 0.1-0.5 | 0.2-1 | 0.2-1 | 0.5-2.5 |
| Failure to Provide or Update Written or Graphic Plans Required by SWPPP | 0.2-1 | 0.5-2.5 | 1.0-5 | 1.0-5 |
| Failure to comply with Other Provisions of the NPDES Permit | 0.1-0.5 | 0.2-1 | 0.2-1 | 0.5-2.5 ${ }^{\text {" }}$ |

## PAVEMENT MARKING REMOVAL (BDE)

Effective: April 1, 2009
Add the following to the end of the first paragraph of Article 783.03(a) of the Standard Specifications:
"The use of grinders will not be allowed on new surface courses."

80231

## PAVEMENT PATCHING (BE)

Effective: January 1, 2010
Revise the first sentence of the second paragraph of Article 701.17(e)(1) of the Standard Specifications to read:
"In addition to the traffic control and protection shown elsewhere in the contract for pavement, two devices shall be placed immediately in front of each open patch, open hole, and broken pavement where temporary concrete barriers are not used to separate traffic from the work area."

80254

## PAYMENTS TO SUBCONTRACTORS (BE)

Effective: June 1, 2000
Revised: January 1, 2006
Federal regulations found at 49 CFR $\S 26.29$ 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.

## PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: November 1, 2008
Revise the first sentence of Article 701.12 of the Standard Specifications to read:
"All personnel on foot, excluding flaggers, within the highway right-of-way shall wear a fluorescent orange, fluorescent yellow/green, or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of ANSI/ISEA 107-2004 for Conspicuity Class 2 garments."

80209

## PRECAST CONCRETE HANDLING HOLES (BDE)

Effective: January 1, 2007
Add the following to Article 540.02 of the Standard Specifications:
"(g) Handling Hole Plugs...........................................................................................1042.16"
Add the following paragraph after the sixth paragraph of Article 540.06 of the Standard Specifications:
"Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar, or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Article 542.02 of the Standard Specifications:
"(ce) Handling Hole Plugs
$1042.16^{\prime \prime}$
Revise the fifth paragraph of Article 542.04(d) of the Standard Specifications to read:
"Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation."

Add the following to Article 550.02 of the Standard Specifications:
"(o) Handling Hole Plugs $1042.16^{\prime \prime}$

Replace the fourth sentence of the fifth paragraph of Article 550.06 of the Standard Specifications with the following:
"Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation."

Add the following to Article 602.02 of the Standard Specifications:
"(p) Handling Hole Plugs....................................................................................... 1042.16(a)"
Replace the fifth sentence of the first paragraph of Article 602.07 of the Standard Specifications with the following:
"Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Section 1042 of the Standard Specifications:
"1042.16 Handling Hole Plugs. Plugs for handling holes in precast concrete products shall be as follows.
(a) Precast Concrete Plug. The precast concrete plug shall have a tapered shape and shall have a minimum compressive strength of $3000 \mathrm{psi}(20,700 \mathrm{kPa})$ at 28 days.
(b) Polyethylene Plug. The polyethylene plug shall have a "mushroom" shape with a flat round top and a stem with three different size ribs. The plug shall fit snuggle and cover the handling hole.

The plug shall be according to the following.

| Mechanical Properties | Test Method | Value (min.) |
| :--- | :---: | :---: |
| Flexural Modulus | ASTM D 790 | $3300 \mathrm{psi}(22,750 \mathrm{kPa})$ |
| Tensile Strength (Break) | ASTM D 638 | $1600 \mathrm{psi}(11,030 \mathrm{kPa})$ |
| Tensile Strength (Yield) | ASTM D 638 | $1200 \mathrm{psi}(8270 \mathrm{kPa})$ |


| Thermal Properties | Test Method | Value (min.) |
| :--- | :--- | :--- |
| Brittle Temperature | ASTM D 746 | $-49^{\circ} \mathrm{F}\left(-45^{\circ} \mathrm{C}\right)$ |
| Vicat Softening Point | ASTM D 1525 | $194^{\circ} \mathrm{F}\left(90^{\circ} \mathrm{C}\right)^{\prime \prime}$ |

80171

## RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007
Revised: January 1, 2010
In Article 1030.02(g), delete the last sentence of the first paragraph in (Note 2).
Revise Section 1031 of the Standard Specifications to read:

## "SECTION 1031. RECLAIMED ASPHALT PAVEMENT

1031.01 Description. Reclaimed asphalt pavement (RAP) is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
1031.02 Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District to provide verification of the quality of the RAP to clarify appropriate stockpile.
(a) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least $C$ quality. All FRAP shall be fractionated prior to testing by screening into a minimum of two size fractions with the separation occurring on or between the \#4 ( 4.75 mm ) and $1 / 2 \mathrm{in}$. ( 12.5 mm ) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass one sieve size larger than the maximum sieve size specified for the mix the RAP will be used in.
(b) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class 1, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer; combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
(c) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. . The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least $C$ quality. This RAP may have an
inconsistent gradation and/or asphalt binder content prior to processing: All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the $5 / 8 \mathrm{in}$. ( 16 mm ) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
(d) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, Superpave (High or Low ESAL), HMA (High or Low ESAL), or equivalent mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least $D$ quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
(e) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (ie. chip seal), pavement fabric, joint sealants, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.
1031.03 Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.

For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons ( 450 metric tons) for the first 2000 tons ( 1800 metric tons) and one sample per 2000 tons ( 1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons ( 3600 metric tons).

For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

Evaluation of Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable $\mathrm{G}_{\mathrm{mm}}$. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

| Parameter | FRAP/Homogeneous <br> /Conglomerate | Conglomerate "D" <br> Quality |
| :---: | :---: | :---: |
| $1 \mathrm{in} .(25 \mathrm{~mm})$ |  | $\pm 5 \%$ |


| $1 / 2 \mathrm{in}.(12.5 \mathrm{~mm})$ | $\pm 8 \%$ | $\pm 15 \%$ |
| :--- | :---: | :---: |
| No. $4(4.75 \mathrm{~mm})$ | $\pm 6 \%$ | $\pm 13 \%$ |
| No. $8(2.36 \mathrm{~mm})$ | $\pm 5 \%$ |  |
| No. $16(1.18 \mathrm{~mm})$ |  | $\pm 15 \%$ |
| No. $30(600 \mu \mathrm{~m})$ | $\pm 5 \%$ |  |
| No. $200(75 \mu \mathrm{~m})$ | $\pm 2.0 \%$ | $\pm 4.0 \%$ |
| Asphalt Binder | $\pm 0.4 \%{ }^{1 /}$ | $\pm 0.5 \%$ |
| $\mathrm{G}_{\mathrm{mm}}$ | $\pm 0.03$ |  |

1/ The tolerance for FRAP shall be $\pm 0.3 \%$.
If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt binder content test results fall outside the appropriate tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

### 1031.04 Quality Designation of Aggregate in RAP/FRAP.

(a) The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate " D " quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
(1) RAP from Class I, Superpave (High ESAL)/HMA (High ESAL), or HMA (Low ESAL) IL-9.5L surface mixtures are designated as containing Class $B$ quality coarse aggregate.
(2) RAP from Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
(3) RAP from Class I, Superpave (High ESAL), or HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class $C$ quality coarse aggregate.
(4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.
(b) The aggregate quality of FRAP shall be determined as follows.

Fractionated stockpiles containing plus \#4 ( 4.75 mm ) sieve coarse aggregate shall have a maximum tonnage of 5000 tons ( 4500 metric tons). The Contractor shall obtain a
representative sample witnessed by the Engineer. The sample shall be a minimum of $50 \mathrm{lb}(25 \mathrm{~kg})$. The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications."
1031.05 Use of RAP/FRAP in HMA. The use of RAP/FRAP shall be a Contractor's option when constructing HMA in all contracts. The use of RAP/FRAP in HMA shall be as follows.
(a) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
(b) Steel Slag Stockpiles. RAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) surface mixtures only.
(c) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better.
(d). Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class $C$ quality or better.
(e) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, conglomerate, or conglomerate DQ .
(f) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in the table below for a given $N$ Design.

Max RAP Percentage

| HMA Mixtures $^{1 / 3 /}$ | Maximum \% RAP |  |  |
| :---: | :---: | :---: | :---: |
| Ndesign | Binder/Leveling <br> Binder | Surface | Polymer <br> Modified |
| 30 | 30 | 30 | 10 |
| 50 | 25 | 15 | 10 |
| 70 | $15 / 25^{2 /}$ | $10 / 15^{21}$ | 10 |
| 90 | 10 | 10 | 10 |
| 105 | 10 | 10 | 10 |

$1 /$ For HMA shoulder and stabilized subbase (HMA) N-30, the amount of RAP shall not exceed $50 \%$ of the mixture.
$2 /$ Value of Max \% RAP if homogeneous RAP stockpile of IL-9.5 RAP is utilized.
3/ When RAP exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed $275^{\circ} \mathrm{F}\left(135^{\circ} \mathrm{C}\right)$ the grades shall be reduced as follows:

## Overlays:

When WMA contains between 20 and 30 percent RAP the high temperature shall be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-22). When WMA contains 30 percent or more RAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

## Full Depth:

When WMA contains between 20 and 30 percent RAP, the low temperature shall be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG64-28). When the WMA contains 30 percent or more RAP. the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
(g) When the Contractor chooses the FRAP option, the percentage of FRAP shall not exceed the amounts indicated in the table below for a given $N$ Design.

## Max FRAP Percentage

| HMA Mixtures ${ }^{1 / 2 /}$ | Maximum \% FRAP |  |  |
| :---: | :---: | :---: | :---: |
| Ndesign | Binder/Leveling <br> Binder | Surface | Polymer <br> Modified |
| 30 | 35 | 35 | 10 |
| 50 | 30 | 25 | 10 |
| 70 | 25 | 20 | 10 |
| 90 | 20 | 15 | 10 |
| 105 | 10 | 10 | 10 |

1 For HMA shoulder and stabilized subbase (HMA) N30, the amount of FRAP shall not exceed 50 percent of the mixture.

2/ When FRAP exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed $275^{\circ \circ} \mathrm{F}\left(135{ }^{\circ} \mathrm{C}\right)$ the grades shall be reduced as follows:

## Overlays:

When WMA contains between 20 and 30 percent FRAP the high temperature shall be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-22). When WMA contains 30 percent or more FRAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

## Full Depth:

When WMA contains between 20 and 30 percent FRAP, the low temperature shall be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG64-28). When the WMA contains 30 percent or more FRAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
1031.06 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP material meeting the above detailed requirements.

RAP/FRAP designs shall be submitted for volumetric verification. If additional RAP/FRAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP stockpiles may be used in the original mix design at the percent previously verified.
1031.07 HMA Production. The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

HMA plants utilizing RAP/FRAP shall be capable of automatically recording and printing the following information.
(a) Dryer Drum Plants.
(1) Date, month, year, and time to the nearest minute for each print.
(2) HMA mix number assigned by the Department.
(3) Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton ( 0.1 metric ton).
(4) Accumulated dry weight of RAP/FRAP in tons (metric tons) to the nearest 0.1 ton ( 0.1 metric ton).
(5) Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
(6) Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
(7) Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
(8) Aggregate and RAP/FRAP moisture compensator in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)
(b) Batch Plants.
(1) Date, month, year, and time to the nearest minute for each print.
(2) HMA mix number assigned by the Department.
(3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
(4) Mineral filler weight to the nearest pound (kilogram).
(5) RAP/FRAP weight to the nearest pound (kilogram).
(6) Virgin asphalt binder weight to the nearest pound (kilogram).
(7) Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be
inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.
1031.08 RAP in Aggregate Surface Course and Aggregate Shoulders. The use of RAP in aggregate surface course and aggregate shoulders shall be as follows.
(a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply.
(b) Gradation. One hundred percent of the RAP material shall pass the $11 / 2 \mathrm{in}$. ( 37.5 mm ) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

## REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)

Effective: April 1, 2007
Revised: November 1, 2008
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 E810, 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. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll. The color shall conform to the latest appropriate standard color tolerance chart issued by the U.S. Department of Transportation, Federal Highway Administration, and to the daytime and nighttime color requirements of ASTM D 4956.

| Initial Minimum Coefficient of Retroreflection |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| candelas/foot candle/sq ft (candelas/lux/sq m) of material |  |  |  |  |
| Observation <br> Angle (deg.) | Entrance Angle <br> (deg.) | White | Orange | Fluorescent <br> 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 $8 \times 24 \mathrm{in}$. ( $200 \times 600 \mathrm{~mm}$ ) with alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

# REINFORCEMENT BARS - STORAGE AND PROTECTION (BDE) 

Effective: August 1, 2008
| Revised: April 1, 2009
Revise Article 508.03 of the Standard Specifications to read:
"508.03 Storage and Protection. Reinforcement bars 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 epoxy coated bars are stored in a manner where they will be exposed to the weather more than 60 days prior to use, they shall be protected from deterioration such as that caused by 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.

Covering of the epoxy coated bars will not be required when the bars are installed and tied, or when they are partially incorporated into the concrete."

## SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BE)

Effective: July 1, 2004

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 precast concrete products.
Materials. Materials shall be according to Section 1021 of the Standard Specifications.
Mix Design Criteria. The mix design criteria shall be as follows:
(a) The minimum 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 $7.05 \mathrm{cwt} / \mathrm{cu} \mathrm{yd}(418 \mathrm{~kg} / \mathrm{cu} \mathrm{m})$.
(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 of Article 1020.04 of the Standard Specifications 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 $\pm 2 \mathrm{in}$. ( $\pm 50 \mathrm{~mm}$ ) of the Contractor target value, and within the overall Department range of 20 in . $(510 \mathrm{~mm}$ ) minimum to 28 in . $(710 \mathrm{~mm}$ ) 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 .

Placing and Consolidating. The maximum distance of horizontal flow from the point of deposit shall be $25 \mathrm{ft}(7.6 \mathrm{~m})$, unless approved otherwise by the Engineer.

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 $1 \mathrm{in} .(25 \mathrm{~mm})$. Any other method for restoring the fluidity of the concrete shall be approved by the Engineer.

Mix Design Approval. The Contractor shall obtain mix design approval according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products".

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## STORM SEWERS (BDE)

Effective: April 1, 2009
Add the following to Article 550.02 of the Standard Specifications:
"(p) Polyvinyl Chloride (PVC) Profile Wall Pipe-304 1040.03
(q) Polyethylene (PE) Pipe with a Smooth Interior 1040.04
(r) Corrugated Polyethylene (PE) Pipe with a Smooth Interior 1040.04
(s) Polyethylene (PE) Profile Wall Pipe 1040.04"

Add the following to the list of flexible pipes under Class B. storm sewers in the first table of Article 550.03 of the Standard Specifications:
"Polyvinyl Chloride (PVC) Profile Wall Pipe-304
Polyethylene (PE) Pipe with a Smooth Interior
Corrugated Polyethylene (PE) Pipe with a Smooth Interior
Polyethylene (PE) Profile Wall Pipe"
Revise the $2^{\text {nd }}-7^{\text {th }}$ tables of Article 550.03 of the Standard Specifications to read:


| RCMP | Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe |
| :--- | :--- |
| CSP | Concrete Sewer, Storm Drain, and Culvert Pipe |
| ESCP | Extra Strength Clay Pipe |
| PVC | Polyvinyl Chloride (PVC) Pipe |
| CPVC | Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior |
| PVCPW-794 | Polyvinyl Chloride (PVC) Profile Wall Pipe-794 |
| PVCPW-304 | Polyvinyl Chloride (PVC) Profile Wall Pipe-304 |


| PE | Polyethylene (PE) Pipe with a Smooth Interior |
| :--- | :--- |
| CPE | Corrugated Polyethylene (PE) Pipe with a Smooth Interior |
| PEPW | Polyethylene.(PE) Profile Wall Pipe |
| X | This material may be used for the given pipe diameter and fill height. |
| NA | This material is Not Acceptable for the given pipe diameter and fill height. |
| $*$ | May also use standard strength Clay Sewer Pipe |
| $* *$ | May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification. |


| STORM SEWERS <br> KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED <br> FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nom. Dia. | Type 3 <br> Fill Height: Greater than 10 , not exceeding 15 ' |  |  |  |  |  |  |  |  | Type 4 <br> - Fill Height: Greater than 15', not exceeding 20' |  |  |  |  |
| in. | $\mathrm{RCCP}$ Class | $\begin{aligned} & \text { CSP } \\ & \text { Class } \end{aligned}$ | ESCP | PVC | CPVC | $\begin{gathered} \text { PVCPW } \\ -794 \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { PVCPW } \\ -304 \end{array}$ | PE | PEPW | $\begin{aligned} & \text { RCCP } \\ & \text { Class } \end{aligned}$ | PVC | CPVC | $\begin{gathered} \text { PVCPW } \\ -794 \end{gathered}$ | $\begin{gathered} \hline \text { PVCPW } \\ -304 \\ \hline \end{gathered}$ |
| $\begin{aligned} & 10 \\ & 12 \\ & 15 \end{aligned}$ | NA IV IV | $\begin{aligned} & 3 \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{gathered} \hline X \\ X \\ N A \\ \hline \end{gathered}$ | $\begin{aligned} & \hline x \\ & x \\ & x \\ & \hline \end{aligned}$ | $\begin{aligned} & X \\ & X \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{NA} \\ & \mathrm{X} \\ & \mathrm{X} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { NA } \\ \text { X } \\ \text { X } \\ \hline \end{gathered}$ | $\begin{gathered} \hline X \\ X \\ N A \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { NA } \\ & \text { NA } \\ & \text { NA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{NA} \\ & \mathrm{~V} \\ & \mathrm{~V} \end{aligned}$ | $\begin{aligned} & \hline X \\ & X \\ & X \\ & \hline \end{aligned}$ | $\begin{aligned} & x \\ & X \\ & \hline \end{aligned}$ | $\begin{gathered} \hline N A \\ X \\ X \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { NA } \\ X \\ X \\ \hline \end{gathered}$ |
| $\begin{aligned} & 18 \\ & 21 \\ & 24 \\ & \hline \end{aligned}$ | IV IV IV | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & N A \\ & N A \\ & \hline \end{aligned}$ | $\begin{aligned} & x \\ & x \\ & x \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline X \\ & X \\ & X \\ & \hline \end{aligned}$ | $\begin{aligned} & x \\ & X \\ & X \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline X \\ & X \\ & X \\ & \hline \end{aligned}$ | $\begin{gathered} \mathrm{X} \\ \mathrm{NA} \\ \mathrm{X} \\ \hline \end{gathered}$ | $\begin{aligned} & x \\ & x \\ & x \\ & \hline \end{aligned}$ | $\begin{aligned} & V \\ & V \\ & V \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline x \\ & x \\ & x \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline X \\ & X \\ & X \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline x \\ & x \\ & x \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline X \\ & X \\ & X \\ & \hline \end{aligned}$ |
| 27 30 33 | $\begin{aligned} & \hline \mathrm{V} \\ & \mathrm{~N} \\ & \mathrm{~N} \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \mathrm{NA} \\ & \mathrm{NA} \end{aligned}$ | $\begin{aligned} & x \\ & x \\ & x \\ & \hline \end{aligned}$ | $\begin{gathered} \mathrm{X} \\ \mathrm{X} \\ \mathrm{NA} \end{gathered}$ | $\begin{aligned} & x \\ & x \\ & X \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline x \\ & x \\ & x \\ & \hline \end{aligned}$ | $\begin{aligned} & x \\ & X \\ & X \\ & X \end{aligned}$ | $\begin{aligned} & \hline X \\ & X \\ & X \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline V \\ & V \\ & \text { IV } \end{aligned}$ | $\begin{aligned} & X \\ & X \\ & X \\ & \hline \end{aligned}$ | $\begin{gathered} \mathrm{X} \\ \mathrm{X} \\ \mathrm{NA} \\ \hline \end{gathered}$ | $\begin{aligned} & x \\ & x \\ & x \\ & \hline \end{aligned}$ | $\begin{aligned} & x \\ & x \\ & x \\ & \hline \end{aligned}$ |
| 36 42 48 | IV IV IV | NA NA NA | NA NA NA | $\begin{gathered} \hline X \\ \text { NA } \\ \text { NA } \\ \hline \end{gathered}$ | $\begin{gathered} \hline X \\ N A \\ N A \\ \hline \end{gathered}$ | $\begin{aligned} & x \\ & x \\ & x \\ & X \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline x \\ & x \\ & x \\ & \hline \end{aligned}$ | $\begin{aligned} & X X \\ & X \\ & X \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline x \\ & x \\ & X \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { IV } \\ & \text { IV } \\ & \text { IV } \end{aligned}$ | $\begin{gathered} \text { X } \\ \text { NA } \\ \text { NA } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { X } \\ & \text { NA } \\ & \text { NA } \\ & \hline \end{aligned}$ | $\begin{aligned} & x \\ & x \\ & x \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{X} \\ & \mathrm{X} \\ & \mathrm{X} \\ & \hline \end{aligned}$ |
| 54 60 66 | IV IV III | NA NA NA | NA NA NA | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \hline \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \mathrm{NA} \\ & \mathrm{NA} \end{aligned}$ | $\begin{aligned} & \hline \text { IV } \\ & \text { IV } \\ & \text { IV } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \hline \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & N A \\ & N A \\ & \hline \end{aligned}$ |
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| RCCP | Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe |
| :--- | :--- |
| CSP | Concrete Sewer, Storm Drain, and Culvert. Pipe |
| ESCP | Extra Strength Clay Pipe |
| PVC | Polyvinyl Chloride (PVC) Pipe |
| CPVC | Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior |
| PVCPW-794 | Polyvinyl Chloride (PVC) Profile Wall Pipe-794 |
| PVCPW-304 | Polyvinyl Chloride (PVC) Profile Wall Pipe-304 |
| PE | Polyethylene (PE) Pipe with a Smooth Interior |
| PEPW | Polyethylene (PE) Profile Wall Pipe |
| X | This material may be used for the given pipe diameter and fill height. |
| NA | This material is Not Acceptable for the given pipe diameter and fill height. |
| $* *$ | May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification. |






| RCCP | Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe |
| :--- | :--- |
| PVC | Polyvinyl Chloride (PVC) Pipe |
| CPVC | Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior |
| PVCPW-794 | Polyvinyl Chloride (PVC) Profile Wall Pipe-794 |
| PVCPW-304 | Polyvinyl Chloride (PVC) Profile Wall Pipe-304 |
| X | This material may be used for the given pipe diameter and fill height. |
| NA | This material is Not Acceptable for the given pipe diameter and fill height. |
| $* *$ | May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification. |
| Note | RCCP Class V-150D, etc. shall be furnished according to AASHTO M 170M Section 6. |
|  | These loads are D loads to produce a 0.3 mm crack." |

Revise the last paragraph of Article 550.06 of the Standard Specifications to read:
"PVC and PE pipes shall be joined according to the manufacturer's specifications."
Revise the second paragraph of Article 550.07 of the Standard Specifications to read:
"When using flexible pipe, as listed in the first table of Article 550.03, the aggregate shall be continued to a height of at least $1 \mathrm{ft}(300 \mathrm{~mm})$ above the top of the pipe and compacted to a minimum of 95 percent of standard lab density by mechanical means."

Revise Article 550.08 of the Standard Specifications to read:
"550.08 Deflection Testing for Storm Sewers. All PVC and PE storm sewers shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

For PVC and PE storm sewers with diameters 24 in . ( 600 mm ) or smaller, a mandrel drag shall be used for deflection testing. For PVC and PE storm sewers with diameters over 24 in. ( 600 mm ), deflection measurements other than by a mandrel drag shall be used.

Where the mandrel is used, the mandrel shall be furnished by the Contractor and pulled by hand through the pipeline with a suitable rope or cable connected to each end. Winching or other means of forcing the deflection gauge through the pipeline will not be allowed.

The mandrel shall be of a shape similar to that of a true circle enabling the gauge to pass through a satisfactory pipeline with little or no resistance. The mandrel shall be of a design to prevent it from tipping from side to side and to prevent debris build-up from occurring between the channels of the adjacent fins or legs during operation. Each end of the core of the mandrel shall have fasteners to which the pulling cables can be attached. The mandrel shall have nine, various sized fins or legs of appropriate dimension for various diameter pipes. Each fin or leg shall have a permanent marking that states its designated pipe size and percent of deflection allowable.

The outside diameter of the mandrel shall be 95 percent of the base inside diameter. For all PVC pipe and PE Profile Wall pipe, the base inside diameter shall be defined using ASTM D 3034 methodology. For all other PE pipe, the base inside diameter shall be defined as the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications.

If the pipe is found to have a deflection greater than that specified, that pipe section shall be removed, replaced, and retested."

Revise Article 1040.04(b) of the Standard Specifications to read:
"(b) Corrugated PE Pipe with a Smooth Interior. The pipe shall be according to AASHTO M 294 (nominal size - 12 to 48 in. ( 300 to 1200 mm )). The pipe shall be Type S or D."

Revised the first and second paragraphs of Article 1040.04(c) to read:
"(c) PE Profile Wall Pipe. The pipe shall be according to ASTM F 894 and shall have a minimum ring stiffness constant of 160 . The pipe shall also have a minimum cell classification of PE 334433C as defined in ASTM D 3350.
(1) Pipe Culverts and Storm Sewers. When used for pipe culverts and storm sewers, the section properties shall be according to AASHTO's Section 17. The manufacturer shall submit written certification that the material meets AASHTO's Section 17 properties."

## 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.

80143

# TEMPORARY EROSION CONTROL (BE) 

Effective: November 1, 2002
Revised: January 1, 2010
Add the following to Article 280.02 of the Standard Specifications to read:
"(k) Filter Fabric .......................................................................................................1080.03"
Revise the third paragraph of Article 280.03 of the Standard Specifications to read:
"Erosion control systems shall be installed prior to beginning any activities which will potentially create erodible conditions. Erosion control systems for areas outside the limits of construction such as storage sites, plant sites, waste sites, haul roads, and Contractor furnished borrow sites shall be installed prior to beginning soil disturbing activities at each area. These offsite systems shall be designed by the Contractor and be subject to the approval of the Engineer."

Add the following paragraph after the third paragraph of Article 280.03 of the Standard Specifications:
"The temporary erosion and sediment control systems shown on the plans represent the minimum systems anticipated for the project. Conditions created by the Contractor's operations, or for the Contractor's convenience, which are not covered by the plans, shall be protected as directed by the Engineer at no additional cost to the Department. Revisions or modifications of the erosion and sediment control systems shall have the. Engineer's written approval."

Revise Article 280.04(a) of the Standard Specifications to read:
"(a) Temporary Ditch Checks. This system consists of the construction of temporary ditch checks to prevent siltation, erosion, or scour of ditches and drainage ways. Temporary ditch checks shall be constructed with rolled excelsior, products from the Department's approved list, or with aggregate placed on filter fabric when specified. Filter fabric shall be installed according to the requirements of Section 282. Riprap shall be placed according to Article 281.04. Manufactured ditch checks shall be installed according to the manufacturer's specifications. Spacing of ditch checks shall be such that the low point in the center of one ditch check is at the same elevation as the base of the ditch check immediately upstream. Temporary ditch checks shall be sufficiently long enough that the top of the device in the middle of the ditch is lower than the bottom of the terminating ends of the ditch side slopes."

Revise the last sentence of the first paragraph of Article $280.04(\mathrm{~g})$ of the Standard Specifications to read:
"The temporary mulch cover shall be according to either Article 251.03 or 251.04 except for any reference to seeding."

Revise Article 280.07(b) of the Standard Specifications to read:
"(b) Temporary Ditch Checks. This work will be measured for payment along the long axis of the device in place in feet (meters) except for aggregate ditch checks which will be measured for payment in tons (metric tons). Payment will not be made for aggregate in excess of 108 percent of the amount specified by the Engineer."

Revise Article 280.07(f) of the Standard Specifications to read:
"(f) Temporary Mulch. This work will be measured for payment according to Article 251.05(b)."

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."

Revise Article 280.08(b) of the Standard Specifications to read:
"(b) Temporary Ditch Checks. This work will be paid for at the contract unit price per foot (meter) for TEMPORARY DITCH CHECKS except for aggregate ditch checks which will be paid for at the contract unit price per ton (metric ton) for AGGREGATE DITCH CHECKS."

Revise Article 280.08(f) of the Standard Specifications to read:
"(f) Temporary Mulch. Temporary Múlch will be paid for according to Article 251.06."
Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications.
Revise the second sentence of the first paragraph of Article 1081.015(e) of the Standard Specifications to read:
"The upstream facing of the aggregate ditch check shall be constructed of gradation CA 3. The remainder of the ditch check shall be constructed of gradation RR 3."

80087

# THERMOPLASTIC PAVEMENT MARKINGS (BDE) 

Effective: January 1, 2007
Revise Article 1095.01(a)(2) of the Standard Specifications to read:
"(2) Pigment. The pigment used for the white thermoplastic compound shall be a highgrade pure (minimum 93 percent) titanium dioxide $\left(\mathrm{TiO}_{2}\right)$. The white pigment content shall be a minimum of ten percent by weight and shall be uniformly distributed throughout the thermoplastic compound.

The pigments used for the yellow thermoplastic compound shall not contain any hazardous materials listed in the Environmental Protection Agency Code of Federal Regulations (CFR) 40, Section 261.24, Table 1. The combined total of RCRA listed heavy metals shall not exceed 100 ppm when tested by X -ray fluorescence spectroscopy. The pigments shall also be heat resistant, UV stable and color-fast yellows, golds, and oranges, which shall produce a compound which shall match Federal Standard 595 Color No. 33538. The pigment shall be uniformly distributed throughout the thermoplastic compound."

Revise Article 1095.01(b)(1)e. of the Standard Specifications to read:
"e. Daylight Reflectance and Color. The thermoplastic compound after heating for four hours $\pm$ five minutes at $425 \pm 3^{\circ} \mathrm{F}\left(218.3 \pm 2^{\circ} \mathrm{C}\right)$ and cooled at $77^{\circ} \mathrm{F}\left(25^{\circ} \mathrm{C}\right)$ shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45 degree circumferential/zero degree geometry, illuminant C , and two degree observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm .

White: Daylight Reflectance ..... 75 percent min.
*Yellow: Daylight Reflectance ..... 45 percent min.
*Shall meet the coordinates of the following color tolerance chart.

| x | 0.490 | 0.475 | 0.485 | 0.530 |
| :--- | :--- | :--- | :--- | :--- |
| y | 0.470 | 0.438 | 0.425 | $0.456^{\prime \prime}$ |

Revise Article 1095.01(b)(1)k. of the Standard Specifications to read:
"k. Accelerated Weathering. After heating the thermoplastic for four hours $\pm$ five minutes at $425 \pm 3^{\circ} \mathrm{F}\left(218.3 \pm 2^{\circ} \mathrm{C}\right)$ the thermoplastic shall be applied to a steel wool abraded aluminum alloy panel (Federal Test Std. No. 141, Method 2013) at a film thickness of 30 mils ( 0.70 mm ) and allowed to cool for 24 hours at room temperature. The coated panel shall be subjected to accelerated weathering
using the light and water exposure apparatus (fluorescent UV - condensation type) for 75 hours according to ASTM G 53 (equipped with UVB-313 lamps).

The cycle shall consist of four hours UV exposure at $122^{\circ} \mathrm{F}\left(50^{\circ} \mathrm{C}\right)$ followed by four hours of condensation at $104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)$. UVB 313 bulbs shall be used. At the end of the exposure period, the panel shall not exceed 10 Hunter Lab Delta E units from the original material."

## TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975
This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 4 . In the event the Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather then clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract: A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided
acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

Method of Measurement. The unit of measurement is in hours.
Basis of Payment. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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| :--- | :--- |
| I. | General .................................................................. 1 |

## ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

## I. GENERAL

1. These contract provisions shall apply to all word performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecew ork, station work, or by subcontract.
2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2;
Section IV, paragraphs 1, 2, 3, 4 and 7;
Section V, paragraphs 1 and 2a through 2 g .
5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5,6 and 7 . Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.
6. Selection of Labor: During the performance of this contract, the contractor shall not:
a. Discriminate against labor from any other State, possession, or
territory of the United States (except for employment preference for

Appalachian contracts, when applicable, as specified in Attachment
A), or
b. Employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole,
supervised release, or probation.

## II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $\$ 10,000$ or more.)

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations ( 28 CFR 35, 29 CFR 1630 and 41 CFR 60 (and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
a. The contractor will work with the State highway agency (SHA) and
the Federal Government in carrying out EEO obligations and in their
review of his/her activities under the contract.
b. The contractor will accept as his operating policy the following
statement: "It is the policy of this Company to assure that applicants
are employed, and that employees are treated during
employment,
without regard to their race, religion, sex, color, national origin, age or
disability. Such action shall include: employment, upgrading,
demotion, or transfer; recruitment or recruitment advertising;

## layoff or

termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship,
preapprenticeship,
and/or on-the-job-training."
2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.
3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be review ed and explained. The meetings will be conducted by the EEO Officer.
b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor. c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees,
applicants for employment and potential employees.
e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.
b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.
5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be follow ed:
a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions review ed, such corrective action shall include all affected persons.
d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

## 6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be
in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.
c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:
a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed tow ard qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.
d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or quailifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.
8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.
a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from
and to utilize DBE subcontractors or subcontractors with meaningful
minority group and female representation among their employees.

Contractors shall obtain lists of DBE construction firms from SHA
personnel.
c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.
9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
a. The records kept by the contractor shall document the following:
(1) The number of minority and non-minority group members
and women employed in each work classification on the project;
(2) The progress and efforts being made in cooperation w ith
unions, when applicable, to increase employment
opportunities for minorities and women;
(3) The progress and efforts being made in locating, hiring, training,
qualifying, and upgrading minority and female employees; and
(4) The progress and efforts being made in securing the services of

DBE subcontractors or subcontractors with meaningful minority and
female representation among their employees.
b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

## III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $\$ 10,000$ or more.)
a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to aw ard of subcontracts or consummation of material supply agreements of $\$ 10,000$ or more and that it will retain such certifications in its files.

## IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding $\$ 2,000$ and to all related subcontracts, except for projects located
on roadways classified as local roads or rural minor collectors, which are exempt.)

## 1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the w orkers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1 (b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.
b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.
c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

## 2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
(2) the additional classification is utilized in the area by the construction industry;
(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.
c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the
contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advised the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which w ork is performed in the classification.

## 3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a
class of laborers or mechanics includes a fringe benefit which is not
expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.
b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## 4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:
(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
(2) The allow able ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any
employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the w ork actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.
(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymanlevel hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid
the full amount of fringe benefits listed on the wage determination
for the applicable classification. If the Administrator for the Wage
and Hour Division determines that a different practice prevails for
the applicable apprentice classification, fringes shall be paid in accordance with that determination.
(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predet ermined rate for the comparable work performed by regular employees until an acceptable program is approved.

## b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.
(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.
(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.
(4) In the event the Employment and Training Administration
withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the w ork performed until an acceptable program is approved.
c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

## 5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

## 6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## 7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workw eek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workw eek.

## 8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of $\$ 10$ for each calendar day on which such employee was required or
permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

## 9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

## V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding $\$ 2,000$ and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

## 1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

## 2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section $1(b)(2)(B)$ of the Davis Bacon Act); daily and weekly number of hours w orked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section $1(b)(2)(B)$ of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain w ritten evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.
c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely
all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for submitting payroll copies of all subcontractors.
d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
(1) that the payroll for the payroll period contains the information required to be maintained under paragraph $2 b$
of this Section V and that such information is correct and complete;
(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
(3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for
the classification of worked performed, as specified in the applicable
wage determination incorporated into the contract.
e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.
g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after w ritten notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

## VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadw ay and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units show n on Form FHWA-47. c. Furnish, upon the completion of the contract, to the SHA resident engineer on /Form FHWA-47 together with the data
required in paragraph 1 b relative to materials and supplies, a final labor summary of all contract work indicating the total hours w orked and the total amount earned.
2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

## VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsew here in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractors' own organization (23 CFR 635).
a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment ow ned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
b. "Specialty Items" shall be construed to be limited to work that requires highly specialized know ledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.
4. No portion of the contract shall be sublet, assigned or otherw ise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

## VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in
surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S. C. 333).
3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

## IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the follow ing notice shall be posted on each Federal-aid highw ay project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

## NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:
"Whoever, being an officer, agent or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than $\$ 10,000$ or imprisoned not more than 5 years or both."

## X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $\$ 100,000$ or more).

By submission of this bid or the execution of this contract, or
subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended ( 42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended ( 33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract aw ard, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

## XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:
(Applicable to all Federal-aid contracts - 49 CFR 29)
a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below. b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. How ever, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant know ingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is
submitted if any time the prospective primary participant learns that
its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant,"
"person," " primary covered transaction," "principal,"
"proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal
is submitted for assistance in obtaining a copy of those regulations.
f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions
and in all solicitations for lower tier covered transactions. h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
j. Except for transactions authorized under paragraph $f$ of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

## Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions

1. The prospective primary participant certifies to the best of its know ledge and belief, that it and its principals:
a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency; b. Have not within a 3 -year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
c. Are not presently indicted for or otherw ise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
d. Have not within a 3 -year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

## 2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other low er tier transactions of $\$ 25,000$ or more - 49 CFR 29)
a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective low er tier participant learns that its certification was erroneous by reason of changed circumstances.
d. The terms "covered transaction," " debarred," "suspended," "ineligible," "primary covered transaction,"
"participant," "person," "principal," "proposal," and
"voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
e. The prospective lower tie participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
f. The prospective low er tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Low er Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealing.
i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a low er tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
2. Where the prospective primary participant is unable to certify

## Certification Regarding Debarment, Suspension, Ineligibility And

 Voluntary Exclusion-Lower Tier Covered Transactions:1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

## XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000-49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the aw arding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $\$ 10,000$ and not more than $\$ 100,000$ for each such failure.
3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $\$ 100,000$ and that all such recipients shall certify and disclose accordingly.

## MINIMUM WAGES FOR FEDERAL AND FEDERALLY

ASSISTED CONSTRUCTION CONTRACTS
This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevail ing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

## NOTICE

The most current General Wage Determination Decisions (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at http://www.dot.state.il.us/desenv/delett.html.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.
The instructions for subscribing are at http://www.dot.state.il.us/desenv/subsc.html.
If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.


[^0]:    If more than two parties are in the joint venture, please attach an additional signature sheet.

[^1]:    | The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

