

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

PREQUALIFICATION

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

REQUESTS FOR AUTHORIZATION TO BID

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

WHO CAN BID ?

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

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID? When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status" (BDE 124INT) he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued a **Proposal Denial and/or Authorization Form**, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Proposal Denial and/or Authorization Form** will indicate the reason for denial.

ABOUT AUTHORIZATION TO BID: Firms that have not received an authorization form within a reasonable time of complete and correct original document submittal should contact the department as to status. This is critical in the week before the letting. These documents must be received three days before the letting date. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions.

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

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

The Internet is the Department's primary way of doing business. The subscription server e-mails are an added courtesy the Department provides. It is suggested that bidder check IDOT's website <http://www.dot.il.gov/desenv/delett.html> before submitting final bid information.

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

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

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

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

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

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

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

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

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

ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

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

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RETURN WITH BID

Proposal Submitted By
Name
Address
City

Letting November 18, 2005

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

NOTICE TO PROSPECTIVE BIDDERS

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

(SEE INSTRUCTIONS ON THE INSIDE OF COVER)

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



**Illinois Department
of Transportation**

Springfield, Illinois 62764

**Contract No. 97253
JERSEY County
Section 99-00007-00-HP (Elsah)
Project SBIL-9805(1)
District 8 Construction Funds**

PLEASE MARK THE APPROPRIATE BOX BELOW:

- A Bid Bond is included.
- A Cashier's Check or a Certified Check is included

Prepared by

Checked by

F

(Printed by authority of the State of Illinois)

INSTRUCTIONS

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

WHO CAN BID?: Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction. To request authorization, a potential bidder must complete and submit Part B of the Request for Authorization to Bid/or Not For Bid Status form (BDE 124 INT) and submit an original Affidavit of Availability (BC 57).

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

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

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

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

RETURN WITH BID



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of _____

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

**Contract No. 97253
JERSEY County
Section 99-00007-00-HP (Elsah)
Project SBIL-9805(1)
District 8 Construction Funds**

Construction consists of restroom facilities and collateral work in the existing Village Hall with construction of a parking lot on LaSalle and Mill Streets in the Village of Elsah.

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

RETURN WITH BID

3. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned further declares that he/she has carefully examined the proposal, plans, specifications, form of contract and contract bond, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this proposal he/she waives all right to plead any misunderstanding regarding the same.

4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned further agrees to execute a contract for this work and present the same to the department within fifteen (15) days after the contract has been mailed to him/her. The undersigned further agrees that he/she and his/her surety will execute and present within fifteen (15) days after the contract has been mailed to him/her contract bond satisfactory to and in the form prescribed by the Department of Transportation, in the penal sum of the full amount of the contract, guaranteeing the faithful performance of the work in accordance with the terms of the contract.

5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

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

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

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

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

Attach Cashier's Check or Certified Check Here

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

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

Item _____

Section No. _____

County _____

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

BD 354 (Rev. 11/2001)

RETURN WITH BID

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

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

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

Schedule of Combination Bids

Combination No.	Sections Included in Combination	Combination Bid	
		Dollars	Cents

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

STATE JOB #- C-98-117-99
 PPS NBR - 8-10144-0000

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 97253

ECMS002 DTGECM03 ECMR003 PAGE 1
 RUN DATE - 09/29/05
 RUN TIME - 185034

COUNTY NAME	CODE	DIST	SECTION NUMBER	PROJECT NUMBER	ROUTE
JERSEY	083	08	99-00007-00-HP (ELSAH)	SBIL-9805/001/000	UNMARKED

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
XX004949	INCID BIT SUR SUPER	TON	28.000 X		=		
XX006409	BUILDING RENOVATION	L SUM	1.000 X		=		
XX006410	ACCESS RAMP (INCL HR)	L SUM	1.000 X		=		
20200100	EARTH EXCAVATION	CU YD	62.000 X		=		
20400800	FURNISHED EXCAV	CU YD	78.000 X		=		
35102000	AGG BASE CSE B 8	SQ YD	194.000 X		=		
42400100	PC CONC SIDEWALK 4	SQ FT	624.000 X		=		
42400800	DETECTABLE WARNINGS	SQ FT	12.000 X		=		
44000600	SIDEWALK REM	SQ FT	201.000 X		=		
60263100	INL RECON NEW T3F&G	EACH	1.000 X		=		
67100100	MOBILIZATION	L SUM	1.000 X		=		

TOTAL \$

NOTE:
 *** PLEASE TURN PAGE FOR IMPORTANT NOTES ***

UNMARKED
99-00007-00-HP
JERSEY

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 97253

ECMS002 DTGECM03 ECMR003 PAGE 2
RUN DATE - 09/29/05
RUN TIME - 185034

NOTE:

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

RETURN WITH BID

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

I. GENERAL

A. Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

B. In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. By execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances has been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.

C. In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for termination of the contract and the suspension or debarment of the bidder.

II. ASSURANCES

A. The assurances hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous assurance, and the surety providing the performance bond shall be responsible for the completion of the contract.

B. Felons

1. The Illinois Procurement Code provides:

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

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

C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

(a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois Toll Highway authority.

(b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.

(e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 days after the officer, member, or employee takes office or is employed.

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

RETURN WITH BID

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

D. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

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

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

E. Inducements

1. The Illinois Procurement Code provides:

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

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

F. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

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

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

G. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, chief procurement officer, State purchasing officer, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offerors, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the chief procurement officer.

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

H. Confidentiality

1. The Illinois Procurement Code provides:

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

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

RETURN WITH BID

I. Insider Information

1. The Illinois Procurement Act provides:

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

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

III. CERTIFICATIONS

A. The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous certification, and the surety providing the performance bond shall be responsible for completion of the contract.

B. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State shall contain a certification by the contractor that the contractor is not barred from being awarded a contract or subcontract under this Section. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

2. The bidder certifies that it is not barred from being awarded a contract under Section 50.5.

C. Educational Loan

1. Section 3 of the Educational Loan Default Act provides:

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

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

D. Bid-Rigging/Bid Rotating

1. Section 33E-11 of the Criminal Code of 1961 provides:

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

RETURN WITH BID

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

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

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

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

E. International Anti-Boycott

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

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

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

F. Drug Free Workplace

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

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

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

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

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

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

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

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

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

G. Debt Delinquency

1. The Illinois Procurement Code provides:

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

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

H. Sarbanes-Oxley Act of 2002

1. The Illinois Procurement Code provides:

Section 50-60(c).

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

I. ADDENDA

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

J. Section 42 of the Environmental Protection Act

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

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

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

NA - FEDERAL

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

TO BE RETURNED WITH BID

IV. DISCLOSURES

A. The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous disclosure, and the surety providing the performance bond shall be responsible for completion of the contract.

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$10,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

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

2. Disclosure Forms. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies. **The forms must be included with each bid or incorporated by reference.**

C. Disclosure Form Instructions

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

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

CERTIFICATION STATEMENT

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

(Bidding Company)

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative

Date

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

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO ___
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$90,420.00? YES ___ NO ___
3. Does anyone in your organization receive more than \$90,420.00 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES ___ NO ___
4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than \$90,420.00? YES ___ NO ___
(Note: Only one set of forms needs to be completed 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. It must be signed by an individual who is authorized to execute contracts for the bidding entity. *Note: Signing the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, signed 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 signature box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:

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

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

D. Bidders Submitting More Than One Bid

Bidders submitting multiple bids may submit one set of forms consisting of all required Form A disclosures and one Form B for use with all bids. Please indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms by reference.

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

RETURN WITH BID/OFFER

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

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

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

DISCLOSURE OF FINANCIAL INFORMATION

1. Disclosure of Financial Information. The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than \$90,420.00 (60% of the Governor's salary as of 7/1/01). (Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)

FOR INDIVIDUAL (type or print information)

NAME:

ADDRESS

Type of ownership/distributable income share:

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

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

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

Yes ___ No ___

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

- 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois Toll Highway Authority? Yes ___ No ___
2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) 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 \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes ___ No ___

- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) 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.

Yes ___ No ___

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

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois Toll Highway Authority? Yes ___ No ___

- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) 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 \$90,420.00, (60% of the salary of the Governor as of 7/1/01) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes ___ No ___

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) 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 ___ No ___

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

Yes ___ No ___

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

Yes ___ No ___

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years.

Yes ___ No ___

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter.

Yes ___ No ___

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

Yes ___ No ___

RETURN WITH BID/OFFER

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

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

APPLICABLE STATEMENT

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

Completed by: _____
Name of Authorized Representative (type or print)

Completed by: _____
Title of Authorized Representative (type or print)

Completed by: _____ Date _____
Signature of Individual or Authorized Representative

NOT APPLICABLE STATEMENT

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

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

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative Date _____

RETURN WITH BID/OFFER

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**Form B
Other Contracts &
Procurement Related Information
Disclosure**

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

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

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

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

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

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

THE FOLLOWING STATEMENT MUST BE SIGNED

Name of Authorized Representative (type or print)	

Title of Authorized Representative (type or print)	
_____	_____
Signature of Authorized Representative	Date

RETURN WITH BID

SPECIAL NOTICE TO CONTRACTORS

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

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

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

RETURN WITH BID

**Contract No. 97253
JERSEY County
Section 99-00007-00-HP (Elsah)
Project SBIL-9805(1)
District 8 Construction Funds**

PART II. WORKFORCE PROJECTION - continued

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

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

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

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

PART III. AFFIRMATIVE ACTION PLAN

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

Company _____ Telephone Number _____

Address _____

NOTICE REGARDING SIGNATURE

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

Signature: _____ Title: _____ Date: _____

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

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

Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.

Table C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

RETURN WITH BID

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

RETURN WITH BID

**Contract No. 97253
JERSEY County
Section 99-00007-00-HP (Elsah)
Project SBIL-9805(1)
District 8 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.

(IF AN INDIVIDUAL)

Firm Name _____
Signature of Owner _____
Business Address _____

(IF A CO-PARTNERSHIP)

Firm Name _____
By _____
Business Address _____
Name and Address of All Members of the Firm: _____

(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)

Attest _____
Signature _____
Business Address _____

(IF A JOINT VENTURE)

Corporate Name _____
By _____
Signature of Authorized Representative _____
Typed or printed name and title of Authorized Representative _____

Attest _____
Signature _____
Business Address _____

If more than two parties are in the joint venture, please attach an additional signature sheet.

RETURN WITH BID



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

Item No.
Letting Date

KNOW ALL MEN BY THESE PRESENTS, That We

as PRINCIPAL, and

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

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

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

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

In TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this day of A.D.,

PRINCIPAL SURETY
(Company Name)
By: (Signature & Title) By: (Signature of Attorney-in-Fact)

Notary Certification for Principal and Surety

STATE OF ILLINOIS,
COUNTY OF

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

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

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

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

My commission expires Notary Public

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

Electronic Bid Bond ID# Company/Bidder Name Signature and Title

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

Name:
Address:
Phone No.

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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

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. 97253
JERSEY County
Section 99-00007-00-HP (Elsah)
Project SBIL-9805(1)
District 8 Construction Funds



Illinois Department of Transportation



NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., November 18, 2005. 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. 97253
JERSEY County
Section 99-00007-00-HP (Elsah)
Project SBIL-9805(1)
District 8 Construction Funds**

Construction consists of restroom facilities and collateral work in the existing Village Hall with construction of a parking lot on LaSalle and Mill Streets in the Village of Elsah.

- 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

Timothy W. Martin, Secretary

BD 351 (Rev. 01/2003)

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS
Adopted March 1, 2005

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-02) (Revised 3-1-05)

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107-2	"Railroad Protective Liability Insurance for Local Lettings" (Eff. 3-1-05). Developed by the Bureau of Local Roads & Streets to require insurance policies to be submitted to the letting agency rather than the department.	
108	"Combination Bids (Eff. 1-1-94)(Rev. 3-1-05). Developed by the Bureau of Local Roads & Streets to allow the revision of working days and calendar days. Revised to incorporate applicable portions of deleted Sections 102 & 103	
109	"Contract Claims" (Eff. 1-1-02) (Rev. 5-1-02). Developed by the Bureau of Local Roads..... and Streets to assist local agencies in handling contract claims.	
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355-2	"Asphalt Stabilized Base Course, Plant Mix" (Eff. 2-20-63)(Rev. 1-1-02)	
355-3	"Bituminous Aggregate Mixture Base Course" (6-27-66)(Rev. 1-1-02). Developed by the..... Bureau of Materials and Physical Research and the Bureau of Local Roads and Streets to construct a stabilized base course with paving grade asphalt.	
400	"Penetrating Emulsified Prime" (Eff. 4-1-84)(Rev. 1-1-02).....	
402	"Salt Stabilized Surface Course" (Eff. 2-20-63)(Rev. 1-1-02).....	
403-1	"Penetrating Emulsified Asphalt" (Eff. 1-1-94)(Rev. 1-1-02). Developed for bituminous..... surface treatments on roads that require flexibility and penetration due to low traffic volume.	
403-2	Bituminous Hot Mix Sand Seal Coat" (Eff. 8-1-69)(Rev. 1-1-02).....	
420	"PCC Pavement (Special)" (Eff. 5-12-64)(Rev. 1-1-02). Developed by the Bureau of Local Roads & Streets to allow local agencies to construct quality PCC pavements for low volume roads.	
430	"Paving Brick and Concrete Paver Pavements and Sidewalks" (Eff 1-1-04) Developed by the Bureau of Local Roads & Streets and the Bureau of Materials & Physical Research to provide statewide requirements for paving brick and concrete paver pavements and sidewalks.	
442	"Bituminous Patching Mixtures for Maintenance Use" (Eff 1-1-04). Developed by the Bureau of Local Roads & Streets to reference approved bituminous patching mixtures.	
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503-2	"Furnishing Class SI Concrete (Short Load)" (Eff. 1-1-89) (Rev. 1-1-02). Developed by the Bureau of Local Roads and Streets to allow a load charge to be added when short loads are expected during the contract.	
542	"Pipe Culverts, Type (Furnished)" (Eff. 9-1-64) (Rev. 1-1-02).....	
663	"Calcium Chloride Applied" (Eff. 6-1-58) (Rev. 1-1-02).....	
671	Rescinded	
701	"Flagger Certification" (Eff. 1-1-93) (Rev. 1-1-02).....	
702	"Construction and Maintenance Signs" (Eff 1-1-04) Developed by the Bureau of Local Roads & Streets to require florescent orange sheeting and a minimum sign size of 48" X 48" on construction and maintenance signs.	
1004	"Coarse Aggregate for Bituminous Surface Treatment" (Eff. 1-1-02). Developed by the Bureau of Materials & Physical Research, the Bureau of Local Roads & Streets, and Local Agencies to provide a coarser mix when aggregate producers have adjusted the CA-16 gradation according to the Aggregate Gradation Control System (AGCS) to a finer mix for Hot-Mix Asphalt.	
1013	"Rock Salt (Sodium Chloride)" (Eff. 8-1-69) (Rev. 1-1-02).....	

BDE SPECIAL PROVISIONS
For The November 18, 2005 Letting

The following special provisions indicated by an "x" are applicable to this contract and will be included by the Project Development and Implementation Section of the BD&E. An * indicates a new or revised special provision for the letting.

<u>File Name</u>	<u>Pg.#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80099		Accessible Pedestrian Signals (APS)	April 1, 2003	
80141		Additional Award Criteria	June 1, 2004	
80108		Asbestos Bearing Pad Removal	Nov. 1, 2003	
72541		Asbestos Waterproofing Membrane and Asbestos Bituminous Concrete Surface Removal	June 1, 1989	June 30, 1994
80128		Authority of Railroad Engineer	July 1, 2004	
80065		Bituminous Base Course/Widening Superpave	April 1, 2002	Aug. 1, 2005
80050	106	X Bituminous Concrete Surface Course	April 1, 2001	April 1, 2003
80142	107	X Bituminous Equipment, Spreading and Finishing Machine	Jan. 1, 2005	
80066		Bridge Deck Construction	April 1, 2002	April 1, 2004
50261		Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	Aug. 1, 2001
50481		Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	Aug. 1, 2001
50491		Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	Aug. 1, 2001
50531		Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	Aug. 1, 2001
80118		Butt Joints	April 1, 2004	April 1, 2005
80031		Calcium Chloride Accelerator for Portland Cement Concrete Patching	Jan. 1, 2001	
80077		Chair Supports	Nov. 1, 2002	Nov. 2, 2002
80051		Coarse Aggregate for Trench Backfill, Backfill and Bedding	April 1, 2001	Nov. 1, 2003
80094	108	X Concrete Admixtures	Jan. 1, 2003	July 1, 2004
80112		Concrete Barrier	Jan. 1, 2004	April 2, 2004
80102		Corrugated Metal Pipe Culverts	Aug. 1, 2003	July 1, 2004
* 80114	113	X Curing and Protection of Concrete Construction	Jan. 1, 2004	Nov. 1, 2005
80146	121	X Detectable Warnings	Aug. 1, 2005	
* 80029	123	X Disadvantaged Business Enterprise Participation	Sept. 1, 2000	June 22, 2005
80144		Elastomeric Bearings	April 1, 2005	
31578	131	X Epoxy Coating on Reinforcement	April 1, 1997	Jan. 1, 2003
80041		Epoxy Pavement Marking	Jan. 1, 2001	Aug. 1, 2003
80055		Erosion and Sediment Control Deficiency Deduction	Aug. 1, 2001	Nov. 1, 2001
80103		Expansion Joints	Aug. 1, 2003	
80101	132	X Flagger Vests	April 1, 2003	Aug. 1, 2005
80079	133	X Freeze-Thaw Rating	Nov. 1, 2002	
80072	134	X Furnished Excavation	Aug. 1, 2002	Nov. 1, 2004
80054		Hand Vibrator	Nov. 1, 2003	
80147		Illuminated Sign	Aug. 1, 2005	
80109		Impact Attenuators	Nov. 1, 2003	
80110		Impact Attenuators, Temporary	Nov. 1, 2003	April 1, 2004
80104		Inlet Filters	Aug. 1, 2003	
80080		Insertion Lining of Pipe Culverts	Nov. 1, 2002	Aug. 1, 2003
* 80150		Light Emitting Diode (LED) Pedestrian Signal Head	Nov. 1, 2005	
* 80067		Light Emitting Diode (LED) Signal Head	April 1, 2002	Nov. 1, 2005
80081		Lime Gradation Requirements	Nov. 1, 2002	
80133		Lime Stabilized Soil Mixture	Nov. 1, 2004	April 1, 2005
80045		Material Transfer Device	June 15, 1999	March 1, 2001
80137		Minimum Lane Width with Lane Closure	Jan. 1, 2005	
80138		Mulching Seeded Areas	Jan. 1, 2005	
80082		Multilane Pavement Patching	Nov. 1, 2002	
80129		Notched Wedge Longitudinal Joint	July 1, 2004	
80069		Organic Zinc-Rich Paint System	Nov. 1, 2001	Aug. 1, 2003
80116	135	X Partial Payments	Sept. 1, 2003	
80013		Pavement and Shoulder Resurfacing	Feb. 1, 2000	July 1, 2004

<u>File Name</u>	<u>Pg.#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
53600		Pavement Thickness Determination for Payment	April 1, 1999	Jan. 1, 2004
80022	136	X Payments to Subcontractors	June 1, 2000	Sept. 1, 2003
80155	137	X Payrolls and Payroll Records	Aug. 10, 2005	
80130	139	X Personal Protective Equipment	July 1, 2004	
80134		Plastic Blockouts for Guardrail	Nov. 1, 2004	
80073		Polymer Modified Emulsified Asphalt	Nov. 1, 2002	
80119		Polyurea Pavement Marking	April 1, 2004	
80124		Portable Changeable Message Signs	Nov. 1, 1993	April 2, 2004
* 80139	140	X Portland Cement	Jan. 1, 2005	Nov. 1, 2005
80083	141	X Portland Cement Concrete	Nov. 1, 2002	
80036		Portland Cement Concrete Patching	Jan. 1, 2001	Jan. 1, 2004
419		Precast Concrete Products	July 1, 1999	Nov. 1, 2004
80120		Precast, Prestressed Concrete Members	April 1, 2004	
80084	142	X Preformed Recycled Rubber Joint Filler	Nov. 1, 2002	
80015		Public Convenience and Safety	Jan. 1, 2000	
80121		PVC Pipeliner	April 1, 2004	April 1, 2005
80122		Railroad, Full-Actuated Controller and Cabinet	April 1, 2004	
34261		Railroad Protective Liability Insurance	Dec. 1, 1986	May 1, 1988
80105		Raised Reflective Pavement Markers (Bridge)	Aug. 1, 2003	
80011	143	X RAP for Use in Bituminous Concrete Mixtures	Jan. 1, 2000	April 1, 2002
* 80151		Reinforcement Bars	Nov. 1, 2005	
80032		Remove and Re-Erect Steel Plate Beam Guardrail and Traffic Barrier Terminals	Jan. 1, 2001	Jan. 1, 2005
80085		Sealing Abandoned Water Wells	Nov. 1, 2002	
80131		Seeding and Sodding	July 1, 2004	Aug. 1, 2005
* 80152		Self-Consolidating Concrete for Cast-In-Place Construction	Nov. 1, 2005	
* 80132		Self-Consolidating Concrete for Precast Products	July 1, 2004	Nov. 1, 2005
80096		Shoulder Rumble Strips	Jan. 1, 2003	
80140		Shoulder Stabilization at Guardrail	Jan. 1, 2005	
80135		Soil Modification	Nov. 1, 2004	April 1, 2005
80070		Stabilized Subbase and Bituminous Shoulders Superpave	April 1, 2002	Aug. 1, 2005
80127		Steel Cost Adjustment	April 2, 2004	July 1, 2004
* 80153		Steel Plate Beam Guardrail	Nov. 1, 2005	
80143	147	X Subcontractor Mobilization Payments	April 2, 2005	
80086	148	X Subgrade Preparation	Nov. 1, 2002	
80136		Superpave Bituminous Concrete Mixture IL-4.75	Nov. 1, 2004	
80010		Superpave Bituminous Concrete Mixtures	Jan. 1, 2000	April 1, 2004
80039		Superpave Bituminous Concrete Mixtures (Low ESAL)	Jan. 1, 2001	April 1, 2004
* 80075		Surface Testing of Pavements	April 1, 2002	Nov. 1, 2005
80145		Suspension of Slipformed Parapets	June 11, 2004	
80092		Temporary Concrete Barrier	Oct. 1, 2002	Nov. 1, 2003
80087		Temporary Erosion Control	Nov. 1, 2002	
80008		Temporary Module Glare Screen System	Jan. 1, 2000	
80106		Temporary Portable Bridge Traffic Signals	Aug. 1, 2003	
80098		Traffic Barrier Terminals	Jan. 1, 2003	
57291	149	X Traffic Control Deficiency Deduction	April 1, 1992	Jan. 1, 2005
20338		Training Special Provisions	Oct. 15, 1975	
80107		Transient Voltage Surge Suppression	Aug. 1, 2003	
80123	150	X Truck Bed Release Agent	April 1, 2004	
* 80154		Turf Reinforcement Mat	Nov. 1, 2005	
80149		Variable Spaced Tining	Aug. 1, 2005	
80048	151	X Weight Control Deficiency Deduction	April 1, 2001	Aug. 1, 2002
80090		Work Zone Public Information Signs	Sept. 1, 2002	Jan. 1, 2005
80125		Work Zone Speed Limit Signs	April 2, 2004	April 15, 2004
* 80126		Work Zone Traffic Control	April 2, 2004	Nov. 1, 2005
80097		Work Zone Traffic Control Devices	Jan. 1, 2003	Nov. 1, 2004

File Name Pg.#
 80071 153 Working Days

Special Provision Title

Effective
 Jan. 1, 2002

Revised

The following special provisions have been **deleted** from use:

80113 Curb Ramps for Sidewalk This special provision has been replaced by the BDE Special Provision, "Detectable Warnings".

43761 Driving Guardrail Posts This special provision has been made obsolete by revising Standard 630201 and issuing the BDE Special Provision, "Shoulder Stabilization at Guardrail".

80091 Underdrain Operations This special provision is no longer required and has been deleted.

The following special provisions are in the 2005 Supplemental Specifications and Recurring Special Provisions:

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80052	Adjusting Frames and Grates	Sections 602, 603, and 1043	Aug. 1, 2001	Nov. 1, 2001
80093	Articulated Block Revetment Mat	Sections 285 and 1005	Jan. 1, 2003	
80078	Controlled Aggregate Mixing System	Sections 311, 351, and 481	Nov. 1, 2002	
80100	Epoxy Coatings for Steel Reinforcement	Section 1006	April 1, 2003	
80095	Precast Block Revetment Mat	Sections 285 and 1005	Jan. 1, 2003	
80074	Shoulder Inlets with Curb	Section 610	Aug. 1, 2002	
80117	Stone for Erosion Protection, Sediment Control, and Rockfill	Sections 281 and 1005	Jan. 1, 2004	
80088	Traffic Structures	Sections 1069 and 1077	Nov. 1, 2002	

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

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

State Of Illinois
DEPARTMENT OF TRANSPORTATION

Bureau of Local Roads and Bridges

SPECIAL PROVISIONS
FOR
STANDARD SPECIFICATIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2002, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials", in effect on the date of invitation for bids, and the Supplemental Specifications adopted January 1, 2004 and the Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction designated as Section 99-00007-00-HP, 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

The proposed improvements are located at the rear of the Elsay Village Hall at 26 LaSalle Street in Elsay, Illinois. The improvements consist of the renovation of the lower level to provide public toilets and the construction of a parking lot behind the building. Handicap accessibility ramp and sidewalk from the parking lot to the public toilets is also included. Contractors may obtain access to the lower level by contacting the Mayor, Marge Doerr, at (618) 374-1041 or the Head of Village Maintenance, Bob Smith, at (618) 374-2902. A 24 hour advance notice is requested.

PREQUALIFICATION OF BIDDERS

Contractors bidding on this project shall be prequalified to do the work in accordance with IDOT requirements. Contractors shall also be prequalified with the Capital Development Board of the State of Illinois.

INCIDENTAL BITUMINOUS SURFACING, SUPERPAVE

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

A bituminous materials prime coat will not be required.

The bituminous mixture shall be spread by using a truck mounted box type finishing machine or a paving machine approved by the Engineer.

Payment for this work shall be made at the contract unit price per ton for INCIDENTAL BITUMINOUS SURFACING, SUPERPAVE.

ACCESSIBLE RAMP (INCLUDING HANDRAIL)

At the location shown on the plans, the Contractor shall excavate for and construct a handicap accessible ramp, complete with "L" shaped cast in place concrete wall, concrete ramp surface and anodized aluminum handrail. The ramp shall be constructed to the dimensions and elevations shown on the plan sheets and shall conform to ADA requirements currently applicable.

This work shall be done in accordance with Section 503 of the Standard Specifications. Class SI concrete shall be used for all concrete work.

The handrail shall be 1 ½" in diameter Schedule 40 extruded aluminum 6063-T6 alloy, with 1.9" O.D. minimum. Joints may be either welded or mechanical fittings.

The posts and rails shall be hollow sections a minimum of .145" thick. All molded parts shall be 514T alloy for optimum anodic coating and finish. All fasteners shall be Type 316 stainless steel and one-piece internally threaded tubular inserts which receive fasteners shall have minimum tensile strength of 85,000 psi.

The rail and post ends shall be cut accurately and square, and free of burrs, nicks, or other irregularities. All holes drilled to receive one-piece tubular inserts and stainless steel fasteners shall be proper size, tapped as required for positive connection, and countersunk. Posts shall be plumb and rails parallel in the horizontal. Top rails shall be smooth and continuous in accordance with OSHA standards.

One-piece, hollow post extrusions shall be spaced a maximum of 6'0" o.c. All rails shall have internal line-up members at joints to provide a continuous, uniform surface the entire length. All fasteners shall be tightened to completely eliminate play at connections and attachments. Fastener heads shall be covered with high impact aluminum caps to inhibit tampering.

All components shall have one-hour 215R1 clear anodize finish. Anodic film thickness to be 0.7 mil minimum. A written certification as to film thickness, coating weight and seal shall be supplied. Completed railings shall be free of mill finish ends and racking marks.

All components coming in contact with concrete or dissimilar metals shall be coated with bituminous protective coating.

Shop drawings shall be prepared by railing manufacturer showing location of all railings, anchorage methods, splices and attachments.

All posts shall be embedded in the walk as shown on the plans, or furnished with a surface mount plate.

The aluminum handrail shall be as manufactured by Construction Specialties Rigid Rail, Reynolds Aluminum Reyno Rail II, or equal.

Payment for this work shall be made at the contract lump sum price for ACCESSIBLE RAMP (INCLUDING HANDRAIL).

BUILDING RENOVATION

This work consists of the building renovation including construction of an aeration wastewater treatment system. This work shall be done in accordance with the Project Manual included herein as Appendix A and as shown on the plans.

Payment for this work shall be made at the contract lump sum price for BUILDING RENOVATION.

STATUS OF UTILITIES TO BE ADJUSTED

There are no anticipated utility adjustments associated with this project.

**Required Contract Provisions
All Contracts
Monthly Labor Summary and Activity Reporting System**

Effective: 1-1-1995 Revised June 2001

I. Monthly Labor Summary Report, Form SBE 148

The prime contractor and each first and second tier sub-contractor, (hereinafter referred to as "subcontractor") shall submit a certified Monthly Labor Summary Report directly to the District Engineer.

This report is in lieu of submittal of the Monthly Workforce Analysis Report, Form SBE 956.

This report must be received in District Eight no later than the tenth day of the next month.

This Report shall be submitted by the prime contractor and each subcontractor, for each consecutive month, from the start, to the completion of their work on the contract.

The data source for this Report will be a summation of all personnel and hours worked on each subject contract for the month based on weekly payrolls for that month.

The Monthly Labor Summary Report is required to be submitted in one of the following formats:

- a.) For contractors having IDOT contracts valued in the aggregate at \$250,000 or less, the report may be typed or clearly handwritten using Form SBE 148 for submittal to the District Engineer for District Eight.
- b.) For contractors having IDOT contracts valued in the aggregate at more than \$250,000, the report must be submitted in a specific "Fixed Length Comma Delimited ASCII Text File Format". The subject file format is detailed on the next page. Submittal of this file may be by 3.5 inch disk, modem, or by e-mail.

II. Monthly Contract Activity Report, Form SBE 248

The prime contractor and each subcontractor shall submit a monthly report directly to the District Engineer, reflecting their contract activity on all Illinois Department of Transportation contracts they have in force in District Eight.

This report shall be submitted for each consecutive month, from the start, to the completion of all contracts in District Eight.

The report must be received in the District Office no later than the tenth day of the next month.

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Monthly Labor Summary and Activity Reporting System Codes and Formats

Indicated below for your reference are the Employee Codes and File Formats required for this system.

I.) Monthly Labor Summary Report, Form SBE 148

The following employee codes are to be used to identify each individual on the Summary Report:

1. Gender: M - Male F - Female
2. Ethnic Group: 1 - White 2 - Black 3 - Hispanic
4 - American Indian/Alaskan Native 5 - Asian/Pacific Islander
3. Work Classification: OF - Official SU - Supervisor FO - Foremen
CL - Clerical CA - Carpenter EO - Operator ME - Mechanic
TD - Truck Driver IW - Ironworker PA - Painter OT - Other
EL - Electrician PP - Pipefitter TE - Technical LA - Laborer
CM -Cement Mason
4. Employee Status: O - Owner Operator J - Journeyman C - Company
A - Apprentice T - Trainee

Specific "Fixed Length Comma Delimited ASCII File Format"

Order	Field Name	Type	Size
1	Contractor Number	A	4
2	Contractor Reference Number	A	6
3	Contract Number	A	5
4	Period (07/28/2000)	D	10
5	SSN (111-11-1111)	A	11
6	Name	A	40
7	Gender	A	1
8	Ethnic Group	A	1
9	Work Classification	A	1
10	Employee Status	A	1
11	Total Hours (0000060.00)	N	10

File Name Conventions: (Contractor Number + Report Month/Year).Txt
i.e. 20001298.Txt

II.) Monthly Contract Activity Report, Form SBE 248

The following activity codes are to be used to identify the contractors contract status each month on the Monthly Activity Report, Form SBE 248:

- A. Contract Status: 1 - Not Started 2 - Active 3 - No Work 4 - Suspended 5 - Complete

Failure to comply with this special provision may result in the withholding of payments to the contractor, and/or cancellation, termination, or suspension of the contract in whole or part.

Compliance with this Special Provision shall be considered incidental to the cost of the contract and no additional compensation will be allowed for any costs incurred.

All prime and subcontractors having contracts in the aggregate exceeding \$250,000 must provide a "Fixed Length Comma Delimited ASCII File" for approval prior to the start of construction.

This Special Provision must be included in each subcontract agreement.

monitor/molassp2

REQUIRED CONTRACT PROVISIONS ALL CONTRACTS

PAYROLLS and PROCEDURES

EFFECTIVE 2/5/1975, REVISED 11/7/1986, 1/14/1994, and June 2001

The prime contractor and each subcontractor shall submit a weekly certified original and one copy of their company's payroll directly to the District Engineer.

Payrolls must be received within seven days of the payroll ending period.

Payroll data shall be submitted on Payroll Form RE 48 or an approved facsimile.

Every person paid by a contractor or subcontractor in any manner for his or her labor in the construction, prosecution, completion, or repair of this public work is **employed** and receiving "wages", regardless of any contractual relationship alleged to exist between him or her and the real employer.

Payroll data shall include all persons employed on the job site.

The following employee codes are to be used to identify each individual on the payroll:

- A. **Gender:** M - Male F - Female
- B. **Ethnic Group:** 1 - White 2 - Black 3 - Hispanic
4 - American Indian/Alaskan Native 5 - Asian/Pacific Islander
- C. **Work Classification:** OF - Officials SU - Supervisors FO - Foremen
CL - Clerical CA - Carpenters EO - Operators ME - Mechanics
TD - Truck Drivers IW - Ironworkers PA - Painters CM - Cement Masons
EL - Electricians PP - Pipefitters TE - Technical LA - Laborers
OT - Other
- D. **Employee Status:** O - Owner Operator J - Journeyman C - Company
A - Apprentice T - Trainee

Payroll data shall be submitted by the prime contractor and each subcontractor for each consecutive week, from the start to the completion of their work. When there has been no activity during a work week, a payroll is still required to be sent to the District Engineer, with the appropriate box ("No Work", "Suspended", "Completed") checked at the bottom of the Payroll Form RE 48. Do Not check any of these boxes when payroll data is being reported on the payroll.

The Department of Transportation is requesting disclosure of information necessary to accomplish the statutory purpose as outlined under 23CFR part 230 and 41CFR part 60.4 and the Illinois Human Rights Act. Disclosure of this information is REQUIRED. Failure to comply with this special provision may result in the withholding of payments to the contractor, and/or cancellation, termination, or suspension of the contract in whole or part.

Compliance with this Special Provision shall be considered incidental to the cost of the contract and no additional compensation will be allowed for any costs incurred.

This Special Provision must be included in each subcontract agreement.

Project Manual

Renovation Work
Installing Public Toilets

Elsah Village Hall

LaSalle Street
Elsah, Illinois

J.R. Luer & Associates
731 Fieldcrest, St. Louis, Mo. 63126 (314) 962-9660
Laura Johnson Associate
3935A Juniata St. Louis, Mo. 63116 (314) 664-9408

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None in this specification

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SECTION 01000 – SPECIAL CONDITIONS

DEFINITIONS:

"Architect": J.R. Luer & Associates, Architects/Planners
731 Fieldcrest Court
St. Louis, Missouri 63126
Phone: (314) 962-9660

"Drawings": The drawing referred to in and accompanying these specifications consist of the drawings prepared by and bearing the name of the above defined Architect, bearing the date September 25, 2000 and titled: Elsay Village Hall, LaSalle Street, Elsay, Illinois,

"Project No." 99060.

DESCRIPTION OF WORK:

WORK TO BE DONE:

It is the objective of this contract to:

Renovate the old Elsay Jail into toilet rooms for the Village Hall (Museum).

All work shall be accomplished so that the finished project is in complete spirit and harmony with the balance of the building. All work must comply with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings. It must be kept in mind at all times that this is a historic building. The Architect must approve any deviation in writing.

The Contractors shall provide all items, articles, materials, operations, or methods listed, mentioned, or scheduled on the drawings and/or specified herein, including all labor, materials, equipment, and incidentals necessary and required.

RESTORATION SPECIALIST:

General Contractor or Contractors shall be firms with not less than five (5) years of successful experience in contracting projects similar to this project, and have in there employ skilled personnel capable of executing the work required for this project.

PRE-BID INSPECTION:

The Contractor may contact the Village Mayor, Marge Doerr, at (618) 374-1041 or the Head of Village Maintenance, Bob Smith, at (618) 374-2902 to arrange an inspection of existing conditions. A 24 hour notice is required for inspection visits.

NUMBER OF CONSTRUCTION DOCUMENTS TO BE FURNISHED:

The Owner will furnish the Contractor with a minimum of five (5) complete sets of plans and specifications at no charge.

PRE-CONSTRUCTION CONFERENCE:

A pre-construction conference will be held at the job site prior to beginning date of construction. The date, time, and exact place of this meeting will be determined after contract award and all interested parties will be notified. The Contractor shall arrange to have the job superintendent and any prime subcontractors present at the meeting. During the pre-construction conference, the construction procedures and information necessary for submitting payment requests will be discussed and materials distributed, along with any other pertinent information.

SHOP DRAWINGS:

After the contractor has reviewed and approved the shop drawings, the contractor shall submit the shop drawings to the Architect for review. The contractor shall provide shop drawings for the following materials and equipment:

Section 10160 – Solid Plastic Toilet Partitions and Urinal Screens;
Samples or shop drawing of all proposed materials

Section 15400 – Plumbing product data for the following items:
Plumbing Fixtures.

Section 16000 – Electric product data for the following items:
Electric Fixtures.

VERIFYING MEASUREMENTS:

Each subcontractor shall obtain necessary measurements from other contractors in order that his work may fit other branches of work; and shall further verify necessary measurements at buildings in order that his work may fit that already in place.

TEMPORARY FACILITIES:

Temporary Heat: the Owner shall pay for all gas charges. Heating Contractor shall furnish, install, maintain and remove at the completion of the work all temporary ductwork to supply heat within the structure. Heat level shall be as specified or required for the safe and proper installation of various types of work. No temporary heaters will be allowed which emit smoke or soot or otherwise might leave a film or residue on surfaces.

Temporary Electric: the Owner shall pay for electric power charges. Electric Contractor shall furnish, install, maintain and remove at the completion of the work all temporary power and light facilities. See Electrical Section of specifications.

Temporary Toilet Facilities: Contractor shall maintain and identify toilet facilities for use during entire construction time.

Temporary Water: Water for construction purposes will be available from the existing system. All required temporary extensions should be provided and removed by the Contractor.

Barricades: Erect suitable barricades and fences to take all precautions as may be required by code or to protect the public, Owner's staff, and visitors from all hazards connected with this entire construction operation. Keep all such protection facilities in suitable condition at all times. Remove only when directed by Architect or Owner.

Signs: No signs to be erected by any Contractor without the Owner's approval of sign and location.

INSURANCE:

In addition to the standard insurance coverage's the Contractors carry they shall be required to provide a \$1,000,000 liability insurance policy with a rider to protect the Village of Elsau.

SCHEDULE OF OPERATIONS:

Before work is started, the Contractor shall prepare a detailed schedule of all construction operations and shall indicate the sequence of the work, the time of starting and completion of each part, and the installation dates for major items of equipment. The schedule shall be submitted to the Consultant for review.

The Owner may require the Contractor to add to his plant, equipment, or construction forces, as well as increase the working hours, if operations fall behind schedule at any time during the construction period.

WEATHER REQUIREMENTS:

All work shall be performed in temperature ranges that are within the trade-recommended ranges and/or the ranges herein specified. If Contractor's wish to perform work at other temperatures, they shall obtain written permission from the Owner after submitting a written guarantee that all work so performed will meet with all other standards & performances specified. All material and equipment shall be protected from weather conditions, which may in any way alter its ability to perform as designed and specified. Contractor supplying said material and equipment should have this responsibility.

O. S. H. A. STANDARDS:

Each subcontractor shall be acquainted with the Occupational Safety and Health Act standards, and how they apply to this construction project. Knowledge and enforcement of the standards is the sole responsibility of the Contractors.

LAYOUT AND LEVELS:

The Carpentry Contractor shall establish and maintain a permanent benchmark within easy access, but safely located to prevent destruction, locate the building on the site and establish building lines and floor elevations.

The Carpentry Contractor shall lay out all partition lines and door openings on slabs or rough floors for the convenience of mechanical trades. He shall determine and check all equipment locations, lines, levels, and grades for work of all subcontractors.

FIELD CHECK OF EXISTING STRUCTURES:

It shall be the responsibility of the Contractor to check all dimensions and elevations of existing structures, pipelines, conduits, cables, equipment, or other existing items, both above and below ground, affected by or affecting the work under this contract, prior to the start of construction or ordering of materials and equipment affected thereby.

The Contractor's attention is directed to the Instructions to Bidders, which requires that each bidder visit the site of the work to familiarize himself with the arrangement and condition of existing construction. The drawings in general show only existing construction that is to be connected to or that is to remain in place.

PROTECTION OF TREES:

During construction of the improvements, the Contractor shall exercise special care to avoid damage to existing trees not scheduled for removal.

In the event any tree, not scheduled for removal, is damaged the Contractor shall, at his expense, prune the tree, if branches have been broken, or if the tree is severely damaged, shall remove the tree in total.

WORKMANSHIP:

All work performed under this contract shall be of quality craftsmanship. At the Owner's option, the following definitions and tests will be applied where applicable, to determine the acceptance of any work. Work not conforming to the applicable definitions and tests will not be approved.

Straight, plumb, vertical, level, horizontal, tolerance 1/8" maximum in ten (10) feet. Connections to existing work may require a greater variance.

Square: 90 degree +/- 1/8" measured in ten (10) feet from vertex, as determined by triangulation or by means of a carpenter's square. Connections to existing work may require a greater variance.

Smooth Surface: Surfaces to contain no visible marks, holes, cracks, loose elements, waves, depressions, or protrusions unacceptable to the Architect or Contractor whose material will be applied to said surface.

Sharp Lines and Corners: Edges to contain no visible waves, depressions, or protrusions.

Secure: To remain in place under normal intended usage.

Uniform (joints, etc.): Maintaining the same dimensions, spacing, color, texture, and/or Quality.

Flush: No visible difference between adjacent surfaces.

Protect: Taking all necessary precautions and steps to safeguard against any foreseeable occurrence or reaction detrimental to life or materials, or damage to adjacent work.

Damaged, Defective: Any material or labor that will not meet specified performance, function, or appearance.

Quality Contractor, Experienced Workman: To be able to show previously performed work of similar nature.

Acceptance of previous work by others: Commencement by any trade indicates acceptance of previous work by others to be suitable for proper application of his work. The Architect must be given written notice of any damaged or defective work and of the possible effects upon any succeeding work; all damaged material and/or defective work discovered must be brought to the Architect's attention.

UNDERGROUND INSTALLATIONS:

The Contractor shall be solely responsible for locating all existing underground installations, including service connections, in advance of excavating or trenching, by contacting the owners thereof and prospecting. The Contractor shall use his own information and shall not rely upon any information shown on the drawings concerning existing underground installations.

Any delay, additional work, or extra cost to the Contractor caused by existing underground installations shall not constitute a claim for extra work, additional payment, or damages.

MANUFACTURER'S PRINTED DIRECTIONS:

All manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used; cleaned and conditioned, in accord with manufacturer's printed directions (latest edition) unless specified to the contrary. Where reference is made to manufacturer's directions, Contractor shall have, on file at the job site office, a copy of such directions.

CUTTING AND PATCHING:

Each subcontractor shall do necessary cutting for installation of his work. Trade whose work is affected and paid for by trade that did cutting shall do patching. Wherever possible, sleeve holes during construction.

PROTECTION:

Each subcontractor shall protect his work from damage and protect work of others from damage or interference by his work. Present finished work at time of final acceptance in a clean unmarred condition, all equipment and controls operating perfectly.

END OF SECTION 01000

SECTION 01710 -- FINAL CLEAN-UP

GENERAL:

Provide all material, labor and equipment required to thoroughly clean, polish and put into perfect operating order all work under the General Contract prior to acceptance of building by Architect and Owner.

WORKMANSHIP:

Cleaning to be of quality as produced by professional building cleaners.

Clean all glass, remove putty stains, labels, paint from glass, and wash.

Clean and polish all hardware and other exposed non-ferrous metal; do not use any cleaners that would damage finishes or lacquered protective coats.

Remove all marks, stains, fingerprints and other soil or dirt from all painted and decorated work.

Remove all spots, soil and paint from brick and exposed stone work.

Clean all fixtures and equipment

Any soiling of surfaces and debris caused in correcting work by the contractor or his subcontractors after the final cleaning, as herein specified, shall be cleaned up by Contractor causing soil or debris.

All cleaning and necessary re-cleaning must be done to the satisfaction of the Architect and Owner.

END OF SECTION 01710

SECTION 02060 – DEMOLITION

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of the demolition work (cutting and removal) of the existing construction necessary for the restoration as herein specified, shown on the drawings.

Removal of frame wall

Removal of the existing space heater and utility lines for such.

Removal of the existing wood floor and sleepers.

JOB CONDITIONS:

Condition of Structures: The Owner assumes no responsibility for actual condition of structures to be demolished.

Partial Removal: The Owner shall be provided the opportunity to remove certain items from the building prior to any demolition work. Items of salvageable value to Contractor may be removed from structure as work progresses. Salvaged items must be transported from the site as they are removed.

Storage or sale of removed items on site will not be permitted.

Traffic: Conduct demolition operations and removal of debris to ensure minimum interference with roads, alleys, walks and other adjacent occupied areas.

Do not obstruct walks or other occupied or used facilities without permission from the Owner's representative.

Protections: Ensure safe passage of persons around area of demolition. Conduct operations in such a manner as to prevent injury to adjacent buildings, structures, other facilities, and persons.

Damages: Promptly repair damages caused to adjacent facilities by demolition operations at no cost to Owner.

PART 2 – PRODUCTS

NOT APPLICABLE

PART 3 – EXECUTION

DEMOLITION:

All utility lines shall be disconnected in a manner satisfactory to the Utility having jurisdiction. It is the responsibility of this Contractor to contract with the specific trades involved to do this work.

Demolition shall be done in a safe, orderly fashion, taking care to avoid damage to adjacent areas being retained.

All openings created by the removal of exterior masonry shall be temporarily filled and secured with approved materials.

REMOVAL OF DEBRIS:

Debris shall be removed as generated and shall not be allowed to accumulate.

Material and equipment demolished shall become the property of the Contractor unless otherwise noted and shall be removed from the site and disposed of by him.

CLEAN - UP:

Upon completion of work, leave premises ready for use by other trades.

END OF SECTION 02060

SECTION 02200 – EARTHWORK

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of the earthwork is herein specified and shown on the drawings.

Excavate for new concrete floor slab.

Excavate and backfill for drain tile.

Level earth for the installation of vapor barrier and sand ballast.

Refer to: Divisions 15000 and 16000 for excavation and backfill for Mechanical, Electrical and Plumbing work.

JOB CONDITIONS:

Site Information: All trees and shrubs indicated on the Plot Plan "as remaining" shall be protected during this operation. All information concerning property boundary, ground elevation, present obstructions on or near site, location of conduits, pipes, wires, etc., position of sidewalks, curbs, pavements, etc., have been obtained from a source that the Owner believes reliable, but accuracy of such data is not guaranteed, and is furnished solely for accommodation of the contractor. Use of such data is at the contractor's risk and no additional allowance will be granted because of contractor's lack of knowledge of existing site.

Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult the Architect immediately for directions as to procedure. Cooperate with the Owner, and public and private utility companies in keeping services and facilities in operation. Repair damaged utilities to the satisfaction of the utility owner.

PART 2 – PRODUCTS

FILL MATERIALS:

Material for fill shall be earth free from organic material. No frozen earth shall be used.

PART 3 – EXECUTION

Site Preparation: Protect existing utilities that may be encountered and verify their location and whether they are active or abandoned before proceeding with the work. Remove all abandoned foundations, and pavement not indicated to remain.

Excavation: Excavate to the elevations and dimensions, plus allowable clearances for formwork if required. Keep excavations free from water. Excavations are not to be made to full depth during rainy weather, or when freezing temperatures may be expected, unless concrete for foundations or footing can be poured the same day. If water enters the excavations or trenches bailing or pumping may be required prior to placement of the concrete or utility.

Fill and Backfill: Fill and Backfill is to be placed in horizontal layers not more than six (6) inches deep for each lift, and shall be compacted prior to placement of the next lift. Clean all trash and debris from all excavation prior to backfilling. Backfill excavations as promptly as work permits. Material for backfill shall be free of organic or frozen material and shall contain no large pieces of rock.

Compaction: All suitable earth used in backfilling undergraded cuts, shall be compacted to the required density of at least 95 percent of maximum density.

Each 6 inch lift to be compacted shall, if necessary, be wetted or dried, and shall be rolled, tamped, or vibrated to the required density. Regardless of the type of compaction equipment used. The Engineer shall use the optimum moisture as a guide in determining the proper moisture content at which each soil type may be compacted. This moisture content shall be sufficiently high to guard against later expansion due to the entrance of moisture after compaction, and high enough to facilitate compaction and production of desired density. If the moisture content of the material to be compacted will not permit satisfactory compaction to each layer, water shall be added or removed as necessary to obtain the required density. Any costs involved in reducing the moisture content of soils will be at the expense of the Contractor.

Finish Grading: Grade to elevations indicated on the plans, leaving the soil surface uniform and free of rocks and debris. Grade the areas adjacent to pavements and buildings to drain away from these improvements and to prevent ponding. Grade all areas disturbed by removals, excavations or other construction operations. Re-grade as necessary for lawn areas to conform to edges of curbs, sidewalks and pavements on the site.

Disposal of Excess and Waste Materials: Remove combustible trash, debris, excess and waste materials, and dispose of these items properly outside the limits of the site.

UTILITIES:

Give proper notices and make necessary arrangements for protection of water pipes, electric wires, alarm conduit, fireplugs, and all other items encountered that are to remain.

Assume responsibility for any damage done to public or private utilities on or adjacent to the site as a result of excavation, filling or grading work under this contract. Any damage so caused shall be immediately repaired at no expense to the Owner.

END OF SECTION 02200

SOIL TREATMENT FOR TERMITE CONTROL

SECTION 02281 – SOIL TREATMENT FOR TERMITE CONTROL**PART 1 - GENERAL****DESCRIPTION OF WORK:**

Provide soil treatment for termite control, as herein specified.

Provide termite protection under all slabs on grade and around all foundation walls.

Provide termite protection in all crawl spaces prior to the installation of new vapor barrier.

QUALITY ASSURANCE:

In addition to the requirements of these specifications, comply with manufacturer's instructions and recommendations for the work, including preparation of substrate and application.

Engage a professional pest control operator for soil treatment.

JOB CONDITIONS:

Do not apply soil treatment solution until excavating, filling, and grading operations are completed, except as otherwise required in construction operations.

To insure penetration, do not apply soil treatment to excessively wet soils or during inclement weather.

Provide a five (5) year written guarantee certifying that if subterranean termite activity is discovered during the guarantee period, the Contractor will re-treat the soil and also repair or replace damage caused by termite infestation.

PART 2 - PRODUCTS**SOIL TREATMENT SOLUTION:**

Provide a Termite Home Defense System of stakes in crawl space and around the perimeter of the building:

Spectracide Terminate Home Defense stakes
1-888-545-5837
or its equivalent

Use only soil treatment solutions, which are not injurious to children, pets or landscaping.

PART 3 - EXECUTION**INSPECTION:**

Applicator must examine the areas and conditions under which soil treatment before termite control is to be installed and notify the Contractor in writing of conditions detrimental to the

SOIL TREATMENT FOR TERMITE CONTROL

proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Applicator.

APPLICATION:

Apply soil treatment stakes in accordance with the manufacture's latest printed literature.

END OF SECTION 02281

SECTION 03010 – CONCRETE WORK

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of concrete work is shown on the drawings.

QUALITY ASSURANCE:

Codes and Standards:

Comply with the provisions of the following codes, specifications and standards, except where more stringent requirements are shown or specified:

- ACI 301 "Specifications for Structural concrete for Buildings".
- ACI 302 "Recommended Practice for concrete Floor and Slab".
- ACI 306 "Recommended Practice for cold Weather Concrete".
- ACI 605 "Recommended Practice for Hot Weather Concrete".

The contractor is responsible for correction of concrete work which does not conform to the specified requirements, including strength, tolerances, and finishes. Correct deficient concrete as directed by the Architect.

PROPORTIONING AND DESIGN OF MIXES:

Prepare design mixes for each type and strength of concrete in accordance with applicable provisions of ASTM C 94 or ACI 211.1.

Design mixes to provide normal weight concrete with the following properties:

Water/Cement ratio shall be 0.50.

Interior floor slabs not exposed to weather shall be 3,000-psi minimum compressive strength of twenty-eight (28) days.

Foundation walls, footings, etc. exposed to weather shall be 4,000 psi minimum compressive strength at twenty-eight (28) days.

Admixtures:

Use air-entraining admixture in all exterior exposed concrete. Add air-entraining admixture at the manufacturer's prescribed rate to result in concrete at the point of placement having air content within the following limits:

Concrete exposed to freezing and thawing: 5% to 7% air.

Other Concrete: 2% to 4% air.

Use admixtures for water reducing and set-control in strict compliance with the manufacturer's directions.

Slump Limits:

Proportion and design mixes to result in concrete slump at the point of placement as follows:

Ramps and Sloping Surfaces: Not more than 3".

Reinforced foundation Systems: Not less than 1" and not more than 3"

All other Concrete: Not less than 1" and not more than 4".

PART 2 – PRODUCTS

CONCRETE MATERIALS:

Portland Cement: ASTM C 150, Type 1, unless otherwise acceptable to Architect.

Use only one (1) brand of cement throughout the project.

Aggregates: ASTM C 33; provide aggregates from the same source for all exposed concrete.

Maximum Aggregate Size: Not larger than one-fifth of the narrowest dimension between sides of forms, one-third of the depth of slabs, nor three-fourths of the minimum clear spacing between individual reinforcing bar or bundles of bars.

Water: Clean, fresh, drinkable.

Air-Entering Admixtures: ASTM C 260.

Water-Reducing Admixtures: ASTM D 494, Type A.

Set-Control Admixtures: ASTM C 494, as follows:

Type D, water-reducing and retarding.

Calcium chloride will not be permitted in concrete.

RELATED MATERIAL:

Preformed Expansion Joint Fillers: See 07900 Joint Sealers

Joint Sealing Compound: See 07900 Joint Sealers

Moisture Barrier: Clear 6-mil thick polyethylene.

Moisture Retaining Cover: Shall be at Contractors option.

Membrane-forming Curing Compound: ASTM C 309, Type I, unless other type acceptable to the Architect.

FORM MATERIALS:

Forms for Exposed Finish Concrete: Unless otherwise shown or specified, construct formwork for exposed concrete surfaces with plywood, metal, metal-framed plywood faced or other acceptable panel type materials, to provide continuous, straight, smooth, exposed surfaces. Furnish in largest practicable sizes to minimize number of joints and to conform to joint system shown on drawings. Provide for materials with sufficient thickness to withstand pressure of newly placed concrete without bow or deflection.

Form for Unexposed Finish Concrete: Form concrete surfaces, which will be unexposed in finished structure with plywood, lumber, metal or other acceptable materials.

Form Coatings:

Provide commercial formulation form-coating compounds that will not bond with, stain nor adversely affect concrete surfaces, and will not impair subsequent treatments of concrete surfaces requiring bond or adhesion, nor impede wetting of surfaces to be cured with water or curing compound.

REINFORCING MATERIALS:

Reinforcing Bar: ASTM A 615, Grade 60.

Steel Wire: ASTM A 82, Plain, cold-drawn, steel.

Welded Wire Fabric: ASTM A185.

CONCRETE MIXING:

Ready-Mix Concrete: Comply with the requirements of ASTM C 94, and as herein specified.

Delete the references for allowing additional water to be added to the batch for materials with insufficient slump. Addition of water to the batch will not be permitted.

During hot weather, or under conditions contributing to rapid setting of concrete, a shorter mixing time than specified in ASTM C 94 may be required.

When the air temperature is between 85 degrees F. and 90 degrees F., reduce the mixing and delivery time from 1-1/2 hours to 60 minutes, and when the air temperature is above 90 degrees F., reduce the mixing and delivery time to 45 minutes.

DRAINAGE FILL:

Granular fill should be a washed, uniformly graded mixture of crushed stone, or crushed or uncrushed gravel, with 100% passing a 1-1/2" sieve and not more than 5% passing a No. 4 sieve.

PART 3 -- EXECUTION

BUILDING SLAB DRAINAGE COURSE:

Granular fill and moisture barrier: Provide 1-1/2" clean crushed stone fill below concrete slabs within building area and 6-mil thick polyethylene moisture barrier.

Place granular fill material on prepared subgrade in layers of uniform thickness, conforming to indicated cross-section and thickness.

FORMS:

Construct so that concrete members and structures are of correct size, shape, alignment, elevation and position, complying with ACI 347.

Provide openings in formwork to accommodate work of other trades. Accurately place and securely support items built into forms.

PLACING REINFORCEMENT:

Reinforcement: Position, support and secure reinforcement against displacement. Locate and support with metal chairs, runners, bolsters, spacers and hangers as required. Set wire ties so ends are directed into concrete, not toward exposed concrete surfaces.

Install welded wire fabric in as long lengths as practicable, lapping at least one (1) mesh.

JOINTS:

Provide construction, isolation, and control joints as indicated or required. Locate construction joints so as to not impair the strength and appearance of the structure. Place isolation and control joints in slabs-on-ground to stabilize differential settlement and random cracking.

Provide keyways at least 1-1/2" deep in all construction joints between walls and footings.

INSTALLATION OF EMBEDDED ITEMS:

Set and build into the work anchorage devices and other embedded items required for other work that is attached to, or supported by, cast-in-place concrete. Use setting drawings, diagrams, instructions and directions provided by suppliers of the items to be attached thereto.

CONCRETE PLACEMENT:

Concrete Placement: Comply with ACI 304, placing concrete in a continuous operation within planned joints or sections. Do not begin placement until work of other trades affecting concrete is completed.

Protect concrete from physical damage or reduced strength due to weather extremes during mixing, placement, and curing.

In cold weather, comply with ACI 306.

In hot weather, comply with ACI 305.

CONCRETE FINISHES:

Exposed-to-view Surfaces: Provide a smooth formed finish for exposed concrete surfaces. Remove fins and projections, patch defective areas with cement, grout, and rub smooth.

Slab Trowel Finish: Apply trowel finish to monolithic slab surfaces that are exposed-to-view or are to be covered with resilient flooring. Consolidate concrete surface by finish troweling, free of trowel marks, uniform in texture and appearance.

Non-slip Broom Finish: Apply non-slip broom finish to exterior concrete platforms, steps and ramps, and elsewhere as shown on drawings or in schedules.

Immediately after trowel finishing, slightly roughen concrete surface by brooming with fiber bristle broom perpendicular to main traffic route. Coordination required final finish with the Architect before application.

CONCRETE CURING AND PROTECTION:

Begin initial curing as soon as free water has disappeared from exposed surfaces. Where possible, keep continuously moist for not less than 72 hours. Continue curing for at least seven (7) days by use of moisture-retaining cover or membrane-forming curing compound. Cure formed surfaces by moist curing until forms are removed. Provide protections as required to prevent damage to exposed concrete surfaces.

Apply membrane-curing compound to concrete slab surfaces as soon as final finishing operations are complete in accordance with manufacturer's directions.

CONCRETE SURFACE REPAIRS:

Patching Defective Areas: Repair and patch defective areas with cement mortar immediately after removal of forms, but only when acceptable to Architect.

Cut out honeycomb, rock pockets, voids over 1/2" in diameter, and holes left by tie rods and bolts, down to solid concrete but in no case to a depth of less than 1". Make edges of cuts perpendicular to the concrete surface. Before placing cement mortar, thoroughly clean, dampen with water and brush coat the area to be patched with neat cement grout. Proprietary patching compounds may be used when acceptable to Architect.

For exposed-to-view surfaces, blend white Portland cement and standard Portland cement so that, when dry, patching mortar will match color of surroundings. Provide test areas as inconspicuous location to verify mixture and color match before proceeding with patching. Compact mortar in place and strike-off slightly higher than surrounding surface.

Remove and replace concrete having defective surfaces if defects cannot be repaired to the satisfaction of Architect.

END OF SECTION 03010

SECTION 04500 – MASONRY RESTORATION

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of masonry restoration work is shown on the drawings, schedules and as herein specified.

This work includes but is not limited to:

Exterior

East Elevation:

- Restore cement wash on windowsills B and C
- Install a new cement cap/wash on sill of door 2

South Elevation:

N/A

West Elevation:

N/A

North Elevation:

N/A

Interior

Crawl Space - 101

N/A

Women's Toilet - 102

N/A

Vestibule - 103

N/A

Janitor - 104

N/A

Men's Toilet - 105

N/A

QUALITY ASSURANCE:

Restoration Specialist: a firm with not less than three (3) years successful experience in masonry restoration projects employing skilled personnel for execution of the work.

Job Mock-Ups: Prior to start of general masonry restoration, conduct the following procedures. Obtain Architect's acceptance of visual qualities before proceeding with the work.

Submit cured samples of each type of colored grout and mortar, showing range of color, which can be expected, in finished work.

PART 2 – PRODUCTS

MATERIALS:

White Portland cement: ASTM C-150, non-staining.

Lime: ASTM C-207, Type S, Hydrated

Sand: Local sand of texture and size to match original.

Water: Potable.

Chips: White Portland cement chips that simulate the original course lime.

Coloring Material: Match color of existing mortar by use of aggregates matching original aggregate color where possible. Use inorganic coloring pigments if satisfactory color match cannot be attained with natural materials.

The use of admixtures will not be permitted without the prior written approval of Architect.

MORTAR MIXES:

Provide mortar to match original mortar in color, texture, strength, and hardness (density and porosity).

A possible mix for soft lime-sand mortar:

1/4 to 1/2 sack white Portland cement

1 sack lime

3 to 4 cu. ft. of sand to match original

PART 3 – EXECUTION

MASONRY INSTALLATION:

All mortar used must match both in color, texture, strength and hardness (density and porosity) the existing mortar; samples must be approved by Architect.

MASONRY JOINTS shall be tooled to match exactly the original joints exposed in Men's Toilet #205.

Cold Weather Requirements: All masonry work shall be installed at temperatures over 40 degrees F., and with signs of a temperature rise.

Tuckpointing: After careful hand routing (no mechanical routing tools shall be permitted) and cleaning joints, wet joints thoroughly and then apply fresh, pre-hydrated mortar. Allow water to soak into joints, but joints should not be visibly wet with standing water during Tuckpointing.

Fill mortar joints in layers not over 1/4" thick. Compress the final packing as much as possible to completely fill joint. Compact joints solidly before final tooling.

Tool joints to match existing work which has not been re-pointed, unless otherwise indicated. Take care not to spread mortar over edges of brick onto exposed surfaces.

Cement, lime, sand and mortar colors shall be mixed dry and water and lime putty added to bring mixture to proper consistency.

No mortar, which has attained its initial set, shall be used.

This is a historic restoration and must be kept in mind at all times. The Architect must approve any deviations in writing.

Masonry work shall be cleaned of all excess mortar with a thorough drenching of water.

Clean masonry surfaces using stiff nylon or bristle brushes. After scrubbing, thoroughly rinse walls with cold water to remove residue.

Start cleaning at top of the structure and work downward. Thoroughly wet masonry surfaces before scrubbing in order to loosen dirt and lessen amount of necessary scrubbing. Do not use metal scrappers.

COMPLETION:

This Contractor shall clean up and remove all his debris.

END OF SECTION 04500

SECTION 05500 – METAL FABRICATIONS

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of miscellaneous metal work is indicated on drawings or specified herein:

Misc. angles for lintels

QUALITY ASSURANCE:

Codes and Standards: AISC "Specifications for the Design, Fabrication and Erection of Structural Steel for Building"; AWS "Structural Welding Code"; comply with applicable provisions unless otherwise indicate.

SUBMITTALS:

Submit shop drawings for fabrication and erection of all items; indicate fabrication, assembly, erection details, size of all members, fastening, supports, and anchorage. Take field measurements prior to preparation of shop drawings. Approved shop drawings will not relieve Contractor from responsibility of making all work fit actual conditions.

PART 2 – MATERIALS / PRODUCTS

Inserts and Anchorages: Furnish inserts and anchoring devices to be built into other work for installation of miscellaneous metal items; coordinate delivery to job site to avoid delay.

Steel Plates, Shapes, and Bars: ASTM A-36.

Cold-Formed Steel Tubing: ASTM A-500, Grade B.

Steel Pipe: ASTM A53; type as selected, Grade A.

Steel Plates to be Bent or Cold-Formed: ASTM A283, Grade C.

Steel Tubing: (Hot-formed, welded or seamless), ASTM A 501.

Shop Paint: FS TT-P-86, Type II, or SSPC-Paint 14. Apply to cleaned and degreased steel surfaces at rate to provide a 2.0 mil dry film thickness.

Nonshrink Nonferrous Grout: CE CRD C588.

Miscellaneous Lintels: 3-1/2" x 4" x 5/16" steel angles unless noted otherwise. Allow minimum 4" bearing each end.

FABRICATION:

Use materials of size and thickness shown or, if not shown, or required size and thickness to produce strength and durability in finished product. Shop-paint all items not specified to be galvanized after fabrication.

Weld corners and seams continuously; grind exposed welds smooth and flush.

Form exposed connections with hairline, flush joints; use concealed fasteners where possible.

Rough Hardware: Furnish custom fabricated bolts, plated, anchors, hangers, dowels, and other miscellaneous steel and iron shapes for framing, supporting and anchoring woodwork.

PART 3 – EXECUTION

Installation: Perform cutting, drilling, and fitting required for installation; set work accurately in location, alignment and elevation, measured from established lines and levels. Provide anchorage devices and fasteners where necessary for installation to other work.

Set loose items on cleaned bearing surfaces, using wedges or other adjustments as required. Solidly pack open spaces with bedding mortar, consisting of 1 part Portland cement to 3 parts sand and only enough water for packing and hydration, or use commercial nonshrink grout material.

Field Welding: Comply with AWS Code for procedures of manual shielded metal-arc welding, appearance, and quality of welds made, and methods used in correcting welding work.

END OF SECTION 05500

SECTION 06100 -- CARPENTRY

PART 1 - GENERAL

DESCRIPTION OF WORK:

Furnish all labor and materials to complete all miscellaneous carpentry work as indicated on the drawings and/or specified herein.

It is the objective of this contract to renovate the old Elsay jail into ADA accessible toilets for use for the museum above.

Refer to: Section 06400 for Architectural Woodwork
Section 08700 for Hardware
Section 08800 for Glass and Glazing

All other items of carpentry and miscellaneous installation work, even though not mentioned above, but shown on drawings, which may be required to complete the restoration of existing buildings and construction of new must be in spirit and harmony of the original buildings and shall be included in this proposal.

This Contractor's foreman or carpenter shall lay-out all restoration work and will be responsible for it. The Carpenter shall cooperate with the Electrician and other trades to see that all work is carried out properly. The Carpenter shall also work with the millman and keep the mill informed of any changes that may be made in the plans.

Work shall conform to indications on the drawings, to the applicable provisions of the General Conditions and to the specifications for material and workmanship set forth below:

TEMPORARY PROTECTION:

This Contractor shall build protective barriers around existing trees so that same are not damaged during building construction.

Construct temporary stairs, ladders, runways, barricades and railings required in and about the building.

The building shall be closed with temporary doors and windows as the work progresses.

Protect doors and frames, millwork, and similar items from injury after they have been set in place until completion and acceptance.

PRODUCT HANDLING:

Stack framing lumber to insure proper ventilation and drainage. Protect lumber from the elements.

Protect millwork against dampness during and after delivery. Store under cover in a well ventilated building.

Receive, check and store finish hardware. Store in locked area until time of installation.

QUALITY ASSURANCE:

Restoration Specialist: Work must be performed by a firm with not less than five (5) years successful experience in carpentry restoration projects employing skilled personnel for execution of the work.

Lumber Standard: Comply with PS 20.

The Owner reserves the right to reject any carpentry he finds unacceptable.

JOB CONDITION:

Installer must examine the substrates and supporting structure and the conditions under which the carpentry work is to be installed, and notify the Contractor in writing of conditions detrimental to the work. Do not proceed with the installation until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

PART 2 – PRODUCTS

MATERIALS:

General: Nominal size lumber is indicated, except as shown by detail dimensions other wise.

Concealed Framing Lumber(wall plats to be pressure treated):

Light Framing Lumber (4x4 max.): "Standard or Stud" Grade, RS, MC-19, KD, any species.

Wood Blocking: "No. 3 or Utility" Grade, S4S, MC-19, KD, any species.

Plywood Standards: Softwood Plywood- Construction and PSS I-83 (US Dep. Comm.) APA PRP-100 and HPMA HP type and grade as indicated.

Plywood Sheathing Material: Structural I or II, C-D or C-C Grade, exterior waterproof type.

Electrical & Alarm Panels: For backing panels of electrical and communication equipment, provide standard grade plywood, exterior waterproof type. .

Preservative Pressure-Treated Wood: AWPAC1, C2, C9 and AWPB-FDW pressure-treated with water-borne preservatives.

Kiln-dry to 15% moisture content after treatment, except for wood in contact with the ground.

Building Paper: Asphalt saturated felt, 15-lb. Non-perforated, complying with ASTM D 226.

Anchorage and Fastening Materials:

Non-Historic Structures and Not Exposed to View in Historic Structures:

Rough hardware, including spikes, nails, screws, anchors, bolts, and similar items, shall be best quality for their respective use and of size sufficient to draw rigidly secure member in-place. All exposed exterior rough hardware shall be hot-dipped galvanized.

Nails and Staples: FS FF-N-105.

Tacks: FS FF-N-103.

Wood Screws: FS FF-S-111.

Bolt and Studs: FS FF-B-575.

Nuts: FS FF-N-836.

Washers: FS FF-W-92.

Lag Screws or Lag Bolts: FS FF-B-561.

Toggle Bolts: FS FF-B-588.

Bar or Strap Anchors: ASTM A 575 carbon steel bars.

Masonry Anchoring Devices: For expansion shields, nails and drive screws comply with FS FF-S-325.

Non-ferrous or hot-dip zinc coated fasteners, which are non-corrosive and non-staining when used on the exterior.

All anchorage and fasteners shall be installed as per Appendix-C "Recommended Fastening Schedule" BOCA Code.

Historic Structures Exposed to View:

Rough Hardware: Nails and anchors shall be hand-forged or square cut nails to match original.

PART 3 – EXECUTION

INSTALLATION:

General:

Do not use any power tools when fabricating previously painted lumber unless it has had the lead paint removed or it has been tested and it can be proven that no lead paint exists.

Provide framing members of sizes and on spacings shown, and frame openings as shown, or if not shown, comply with the recommendations of the "Manual for House Framing" of the National Forest Products Association. Cut, join, and tightly fit framing around other work. Do not splice structural members between supports unless otherwise detailed. Discard units of material which are unsound, warped, bowed, twisted, improperly treated, not adequately seasoned or too small to fabricate the work with a minimum of joints or the optimum jointing arrangement.

Temporary door closures shall be provided with doors and locks.

Do not fasten temporary doors to finish frames.

Fit carpentry work to other work. Scribe and cope as required for accurate fit.

Set carpentry work accurately to required levels and lines with members plumb and true.

Securely attach carpentry work by anchoring and fastening as shown and as required by BOCA standards.

All existing framing shall be made structurally sound even if not so indicated on the drawings.

Fasteners: Use common wire nails, except as otherwise shown or specified herein. Use finishing nails for exposed work. Do not wax or lubricate fasteners that depend on friction for holding power. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting of wood; pre-drill as required. Do not drive threaded friction type fasteners; turn into place. Tighten bolts and lag screws at installation and re-tighten as required for tight connections prior to closing in or at completion of work.

Millwork:

Installer must examine the areas and conditions under which the architectural woodwork and related items are to be installed and notify the Contractor in writing of conditions detrimental to the timely completion of the work. Do not proceed with the work until the unsatisfactory conditions have been corrected in a manner acceptable to the installer.

Condition wood work to the average prevailing humidity conditions in the installation area prior to installation.

All finish work, millwork and any other exposed surfaces on historic buildings shall be nailed with square head nails of appropriate size for the job.

Re-build, repair and/or patch existing millwork as noted.

Erect existing millwork items with salvaged screws or cut nails all to match original installation in a careful manner so as to result in first class work.

Finished work shall be left smooth, and without tool marks.

Hardware:

Install new replacement hardware according to manufacturer's printed instructions.

All original hardware shall be removed and given to the hardware supplier who shall arrange to have it reconditioned.

All existing hardware removed from building and not to be re-used shall remain the property of the Owner.

All carpentry work shall be accomplished so that finished work is in complete spirit and harmony with the existing original work in the original house. This is a historic restoration and must be kept in mind at all times. Any deviations must be approved in writing by the Architect.

ADJUSTMENT, CLEANING, FINISHING, AND PROTECTION:

Repair damaged and defective woodwork wherever possible to eliminate defects functionally and visually; where not possible to repair properly, replace woodwork. Adjust joinery for uniform appearance.

Refer to Section 09900 for final finishing of installed architectural woodwork.

Protection: Installer of architectural woodwork shall advise Contractor of final protection and maintainer conditions necessary to ensure that work will be without damage or deterioration at time of acceptance.

END OF SECTION 06100

SECTION 06400 – ARCHITECTURAL WOODWORK

PART 1 - GENERAL

DESCRIPTION OF WORK:

Furnish all labor, material, equipment and services necessary to fabricate and deliver to the job site all millwork as herein specified and/or shown on the drawings.

It is the objective of this contract to renovate the interior of the Benjamin Stephenson House basement for use as Public Toilets.

The types of architectural woodwork include, but are not necessarily limited to the following:

Furnish: Standing and Running Trim
Rebuild/repair/restore historic doors and frames

Furnish all other miscellaneous items of millwork even though not mentioned but which may be required to complete the restoration of the building, shall be included in this proposal.

Refer to: Section 08800 for Glass and Glazing.
Section 06400 for Installation of Architectural Woodwork
Section 08100 for Hollow Metal Door Frames
Section 08200 for Wood Doors

QUALITY ASSURANCE:

Quality Standards: Except as otherwise shown or specified, comply with specified provisions of the following:

Architectural Woodwork Institute (AWI) "Quality Standards".

SUBMITTALS:

Shop Drawings: Submit shop drawings showing each item or a sample of each item.

PART 2 – PRODUCTS

BASIC MATERIALS AND FABRICATION METHODS:

Wood Moisture Content: Provide kiln-dried lumber and maintain optimum moisture content in solid wood (hardwood and softwood) through fabrication, installation and finishing operations of interior work, as follows:

Moisture: 5 to 10 percent range (mild region).

Wood: All wood shall be of the same species, grade and cut as the existing original work, unless otherwise indicated.

Wood: Well seasoned, plain sawn, premium grade.

Species: Douglas fir - Exterior.

Ponderosa pine or White pine -Interior.

Quality Standards: For the following types of architectural woodwork, comply with the indicated standards for Premium Grade as applicable:

Lumber Quality:	AWI Section 100
Standing and Running Trim:	AWI Section 300
Exterior Frames:	AWI Section 900
Exterior Sash:	AWI Section 1000
Stile and Rail Doors:	AWI Section 1400

Fabricate wood trim and jambs to dimensions, profiles and details shown. Route or groove reverse side (backed-out) of trim members to be applied to flat surfaces, except for members with ends exposed in the finished work.

Doors and Frames: shall be exact copies of the existing original doors and shall be fabricated of ponderosa pine or northern white pine unless noted otherwise.

Exterior Trim: all exterior millwork shall be an exact copy of the existing original and shall be fabricated of Douglas fir unless noted otherwise.

Interior Trim: all interior millwork shall be an exact copy of the existing original and shall be fabricated of ponderosa pine or northern white pine unless noted otherwise.

Stile and Rail Doors: shall be an exact copy of the existing original and shall be fabricated of ponderosa pine or northern white pine.

PART 3 – EXECUTION

WORKMANSHIP:

Millwork shall conform to details on the drawings. Critical measurements shall be checked at the job and allowances made for cutting and fitting. All joints shall be rigidly secured and shop assembled in so far as possible. Surfaces shall be sanded smooth ready for finishing.

All doors, window sash and frames shall be fabricated with mortised and tenon joints and assembled with square peg joinery

It must be keep in mind that this new work is to replicate work that is over 180 years old, thus no modern machine marks will be allowed. All joinery shall be the same as the original, mortise and tenon joints held together with square pegs.

Details of all trim (base, stools, window trim, etc.) for the restoration and new work must conform exactly to the existing regarding size, shape, and type of wood. Furnish samples for review of Architect before material is run.

PRODUCT DELIVERY, STORAGE, AND HANDLING:

Do not deliver millwork until plaster and masonry work are dry in the area where millwork is to be installed. The Architect will interpret this requirement. Delivery shall not be made unless a temperature of at least 60 degrees Fahrenheit has been maintained in the building for at least ten days. Protect woodwork during transit, delivery, storage and handling to prevent damage, soiling and deterioration.

END OF SECTION 06400

SECTION 07193 – PLASTIC VAPOR BARRIERS

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of the plastic vapor barrier work is indicated on drawings or specified herein:

Install Polyethylene vapor barrier under the new concrete slab

PART 2 – MATERIALS / PRODUCTS

Polyethylene Elastic Sheet Vapor Barrier (ES-VB):

Polyethylene film of thickness indicated, (4-mil thickness for walls and ceilings and 6-mil thickness for under concrete slabs, if not otherwise indicated), with vapor rating of 0.20 perms or less based on 4-mil thickness.

Miscellaneous Materials:

General: Provide adhesives, tapes, flashings, and accessories as recommended by the vapor barrier manufacturer.

PART 3 - EXECUTION

Clean the substrate of projections and substances detrimental to the work prior to installing vapor barrier. Install vapor barrier in accordance with the recommendations of the vapor barrier manufacturer.

END OF SECTION 07193

SECTION 07200 – INSULATION

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of all thermal insulation work indicated on drawings or specified herein.

The applications of thermal insulation specified in this section include the following:

R-5 Ridged perimeter insulation under and at the edge of the new interior concrete slab on grade.

QUALITY ASSURANCE:

Thermal Conductivity: The thickness shown is for the thermal conductivity (k-value at 75 degrees F.) specified for each material. Provide adjusted thickness as directed for the equivalent use of material having a different thermal conductivity.

PRODUCT HANDLING:

Protection from Deterioration: Do not allow insulation materials to become wet, soiled, or covered with ice or snow. Comply with manufacturer's recommendations for handling, storage and protection during installation.

PART 2 – MATERIALS / PRODUCTS

MATERIALS:

Mineral/Glass Fiber Blanket/Batt Insulation:

Inorganic fibers formed into flexible resilient blankets or semi-rigid resilient sheets; FS HH-I-521; density as indicated, but 1.0-lb. minimum; k-value of 0.27 where thickness is indicated, or k-value and thickness as required to provide "R" values as indicated; manufacturer's standard lengths and widths as required to coordinate with space to be insulated; type as follows:

Ceiling: Unfaced, Type I, High-R rolled batts.
Resistance Rating: R-38 min.
Flame Spread Rating: 20 (ASTM E 84).

Perimeter: 1" x 24" wide, Styrofoam.

Miscellaneous Materials:

Adhesive for Bonding Insulation: The type recommended by insulation manufacturer, and complying with fire-resistance requirements.

Mechanical Anchors: Type and size shown or, if not shown, as recommended by the insulation manufacturer for the type of application shown, and condition of substrate.

PART 3 – EXECUTION

General:

Comply with manufacturer's instructions for the particular conditions of installation in each case. If printed instructions are not available or do not apply to the project conditions, consult the manufacturer's technical representative for specific recommendations before proceeding with the work.

Extend insulation full thickness as shown over entire area to be insulated. Cut and fit tightly around obstructions, and fill voids with insulation. Remove projections, which interfere with placement.

Apply a single layer of insulation of the required thickness, unless otherwise shown or required to make up the total thickness.

General Building Insulation:

Apply insulation units to the substrate by the method indicated, complying with the manufacturer's recommendations.

If no specific method is indicated, bond units to substrate with adhesive or use mechanical anchorage, to provide permanent placement and support of units.

Stuff fiber insulation into miscellaneous voids and cavity spaces as indicated. Compact to approximately 40% of normal maximum volume (to a density of approximately 2.5 lbs. per cu. ft.).

END OF SECTION 07200

SECTION 07900 – JOINT SEALERS

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extend of each type of joint sealer is indicated on the drawings and/or include the following:

The required applications include, but are not necessarily limited to the following:

- Door and Windows - as per details (Type I).
- Interior joints, all types in wet areas (Type II).

JOB CONDITIONS:

The Installer must examine the joint surfaces and backing, and their anchorage to the structure, and the conditions under which the joint sealer work is to be performed, and notify the Contractor in writing of conditions detrimental to the proper and timely completion of the work and performance of the sealants. Do not proceed with the joint sealer work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

Weather Conditions: Do not proceed with installation of sealants under adverse weather conditions, or when temperatures are below or above manufacturer's recommended limitations for installation.

PART 2 – PRODUCTS

MATERIALS / GENERAL:

Colors: For exposed materials, provide color as selected by Architect from manufacturer's standard colors.

Grade of Sealant: For each application, provide the grade of sealant (non-sag, self-leveling, no-track, knife grade, preformed, etc.) as recommended by the manufacturer to achieve the best possible overall performance. Grades specified herein are for normal conditions of installation.

Compatibility: Before installation of each required material, confirm its compatibility with each other material it will be exposed to in the joint system.

ELASTOMERIC SEALANTS (EXTERIOR): TYPE I

Two-Component Polysulfide Sealant:

Polytremdyne based, 2-part elastomeric sealant, complying with FS TT-S-002277E, Class A, Type 2 (non-sag), unless Type 1 recommended by manufacturer for the application shown.

- Tremco Manufacturing Company
- Dow Corning Corporation
- General Electric Corporation
- Pecora Corporation

ELASTOMERIC SEALANTS (INTERIOR): TYPE II

Interior Silicon Rubber Sealant:

Silicon rubber-based, one-part elastomeric sealant, complying with FS TT-S-001543, Class A; compounded specifically for mildew resistance and recommended by manufacturer for interior joints in wet areas; acid-type for non-porous joint surfaces, and non-acid type where one or both joint surfaces are porous.

Tremco Manufacturing Co.
Dow Corning Corporation.
General Electric Corporation.
Pecora Corporation.

MISCELLANEOUS MATERIALS:

Joint Primer/Sealer: Provide the type of joint primer/sealer recommended by the sealant manufacturer for the joint surfaces to be primed or sealed.

Bond Breaker Tape: Polyethylene tape or other plastic tape as recommended by the sealant manufacturer.

Sealant Backer Rod: Compressible rod stock as recommended for compatibility with sealant by the sealant manufacturer.

PART 3 – EXECUTION

Install in accordance with manufacturer's recommendations.

Clean joint surfaces of old material and prime, if recommended by sealant manufacturer.

Support sealant from back with construction as shown, or with joint filler or backer rod.

Protect adjacent finish surfaces and clean after completion of work.

Cure sealants in compliance with manufacturer's instruction and recommendations to obtain high early bond strength, internal cohesive strength and surface durability.

PART 4 – WARRANTY

Contractor shall guarantee sealant for one (1) year from date of acceptance to remain elastic, prevent infiltration, and will make any repairs necessary.

END OF SECTION 07900

SECTION 08100 – STEEL DOORS AND FRAMES

PART 1 - GENERAL

DESCRIPTION OF WORK:

Extent of standard steel door frames is shown and scheduled on drawings.

Builder's Hardware: See Section 08700.

QUALITY ASSURANCE:

Provide doors and frames complying with Steel Door Institute "Recommended Specifications: Standard Steel Doors and Frames" (SDI-100) and as herein specified.

Manufacturer: One of the following:

Amweld Building Products Div.
Ceco Corp.
Fenestra
Mesker Industries, Inc.
Republic Builders Prod. Corp.
SteelCraft Mfg. Co.
Virginia Metal Products
Kewanee Mfg. Co.

Fire-Rated Assemblies: Provide units that display appropriate UL or FM labels for fire rating indicated. Construct and install assemblies to comply with NFPA Standard No. 80.

SUBMITTALS:

Submit shop drawings for hollow metal work, showing anchorage and accessory items.

Provide schedule of door frames using same reference numbers of details and openings as those on contact drawings

PART 2 - PRODUCTS

MATERIALS:

Hot-Rolled Steel Sheets and Strip: Commercial quality carbon steel, pickled and oiled, complying with ASTM A 569 and ASTM A 568.

Cold-Rolled Steel Sheets: Commercial quality carbon steel, complying with ASTM A 366 and ASTM A 568.

Galvanized Steel Sheets: Zinc-coated carbon steel sheets commercial quality, complying with ASTM A 526, with ASTM A 525, G60 zinc coating, mill phosphatized.

Supports and Anchors: Fabricate of not less than 18 gage galvanized sheet steel.

Inserts, Bolts, and Fasteners: Manufacturer's standard units, except hot-dip galvanize items to be built into exterior walls, complying with ASTM A 153, Class C or D as applicable.

Shop Applied Paint: (Primer) Rust-inhibitive enamel or paint, either air-drying or baking, suitable as a base for specified finish paints.

FABRICATION GENERAL:

Fabricate steel door and frame units to be rigid, neat in appearance and free from defects, warp or buckle. Weld exposed joints continuously, grind, dresses, and make smooth, flush and invisible.

Fabricate exposed faces of doors and panels, including stiles and rails of nonflush units, from only cold-rolled steel.

Fabricate frames, concealed stiffeners, reinforcement, edge channels, louvers and moldings from either cold-rolled or hot-rolled steel (at fabricator's option).

Fabricate doors, panels, and frames from galvanized sheet steel. Close top and bottom edges of doors as integral part of door construction or by addition of inverted steel channels.

Exposed Fasteners: Unless otherwise indicated, provide countersunk flat Phillips heads for exposed screws and bolts.

Finish Hardware Preparation:

Prepare doors and frames to receive mortised and concealed finish hardware in accordance with final Finish Hardware Schedule and templates provided by hardware supplier. Comply with applicable requirements of ANSI A 115 series "Specifications for Door and Frame Preparation for Hardware".

Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied finish hardware may be done at project site.

Locate finish hardware as shown on final shop drawings, or if not shown, in accordance with "Recommended Locations for Builder's Hardware," published by Door and Hardware Institute.

Shop Painting:

Clean, treat, and paint exposed surfaces of steel door and frame units, including galvanized surfaces.

Clean steel surfaces of mill scale, rust, oil, grease, dirt and other foreign materials before application of paint.

Apply shop coat of prime paint of even consistency to provide a uniformly finished surface ready to receive finish paint.

STANDARD STEEL FRAMES:

Provide metal frames for doors, transoms, sidelight, borrowed lights, and other openings, of types and styles as shown on drawings and schedules. Conceal fastenings, unless otherwise indicated.

Fabricate frames with mitered and welded corners.

Form frames of hot-dip galvanized steel sheets for all doors.

Gage: Not less than 14, for exterior openings.

Gage: Not less than 16, for interior openings.

Door Silencers: Except on weather-stripped frames, drill stops to receive 2 silencers on strike jambs of single-swing frames and 2 silencers on heads of double-swing frames.

Plaster Guards: Provide 26 gage steel plaster guards or mortar boxes, welded to frame, at back of finish hardware cutouts where mortar or other materials might obstruct hardware operation.

PART 3 – EXECUTION

INSTALLATION:

General: Install standard steel doors, frames, and accessories in accordance with final shop drawings and manufacturer's data, and as herein specified.

Placing Frames:

Comply with provisions of SDI-105 "Recommended Erection Instructions for Steel Frames", unless otherwise indicated.

Except for frames located at in-place concrete or masonry place frames prior to construction of enclosing walls and ceilings. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is completed, remove temporary braces and spreaders leaving surfaces smooth and undamaged.

In masonry construction, locate 3 wall anchors per jamb at hinge and strike levels. Building-in of anchors and grouting of frames is specified in Division 4.

At in-place concrete or masonry construction, set frames and secure to adjacent construction with machine screws and masonry anchorage devices.

Install fire-rated frames in accordance with NFPA Std. No. 80.

In metal stud partitions, install at least 3 wall anchors per jamb at hinge and strike levels. In open steel stud partitions, place studs in wall anchor notches and wire tie. In closed steel stud partitions, attach wall anchors to studs with tapping screws.

Door Installation:

Fit hollow metal doors accurately in frames, within clearances specified in SDI-100.
Place fire-rated doors with clearances as specified in NFPA Standard No. 80.

ADJUST AND CLEAN:

Final Adjustments: Check and readjust operating finish hardware items, leaving steel doors and frames undamaged and in complete and proper operating condition.

END OF SECTION 08100

SECTION 08210 – WOOD DOORS

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent and location of each type of wood door is shown on the drawings and in schedules.

The types of doors required include the following:

Solid Core flush wood doors with veneer faces.

QUALITY ASSURANCE:

Standards: Factory mark each door with the NWMA "Quality Certified" Seal of Approval for conformance with NWMA I.S.1.

Non-Fire-Rated Wood Doors: Provide wood doors complying with AWI, "Industry Standard Section 1400 'Stile & Rail Doors'" of the Architectural Woodwork Institute.

Guarantee: Provide list of installation guarantee, agreeing to replace, refinish, and reinstall defective doors, including doors which have warped or show photographing of construction behind face, as defined by NWMA.

PART 2 – PRODUCTS

Interior Flush Doors, Transparent Finish:

Provide Premium Grade complying with AWI Section 1400 for transparent finish. with plain sliced red oak veneer, book matched

Core: Solid Core Construction

Wood Louvers: Door manufacturer's standard solid wood louvers of same species as face veneers.

PART 3 – EXECUTION

INSTALLATION:

Hardware: For installation, see Section 08700 of these specifications.

Manufacturer's Instructions: Install wood doors in accordance with manufacturer's instructions and as shown.

Clearances: For non-fire doors, provide clearance of: 1/8" at jambs and heads; 1/8" at meeting stiles for pairs of doors; and 1/2" from bottom of door to top of decorative floor finish or covering, except where threshold is shown or scheduled. Provide 1/4" clearance from bottom of door to top of threshold

ADJUST AND CLEAN:

Operation: Rehang or replace doors, which do not swing or operate freely, as directed by the Architect.

Protection of Completed Work: Installer shall advise Contractor of proper procedures required for protection of installed wood doors from damage or deterioration until acceptance of the work.

END OF SECTION 08210

SECTION 08700 – HARDWARE

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of builder's hardware is shown on the drawings and in schedules.

All finish hardware shall be either new or re-conditioned hardware ready for installation.

This Contractor shall also arrange for all existing original hardware to be re-conditioned at his expense.

Refer to: Section 08700 for Installation of Hardware.

QUALITY ASSURANCE:

Acceptable Manufactures: The last article titled "Hardware Schedule" indicates acceptable manufactures for the primary items of builder's hardware. Hardware manufactures listed, as equal shall meet the standards and quality of the prime manufactures specified.

PART 2 – PRODUCTS

HARDWARE SCHEDULE:

The requirements for material, type, grade, size, and function of builder's hardware items is indicated by scheduled designation numbers in the Hardware Schedule at the end of this section.

Although the Hardware Schedule is intended to cover all doors and to establish a type and standard of quality, it shall be the specific duty and responsibility of the finish hardware supplier to examine both the Contract Documents and Site and furnish proper hardware for all openings, whether scheduled or not. Items not specified herein which are necessary for the completion of the work shall be provided.

KEYING:

Furnish three (3) keys for each lock, unless determined otherwise by Owner.

PART 3 – EXECUTION

GENERAL:

All materials used in manufacture of and re-conditioning of hardware shall be best of respective kind and shall be free from imperfections and flaws.

All hardware shall be neatly packed and bear label of identification as to where it is to be applied.

All hardware shall be mounted with hardware nails or screws supplied with the hardware by manufacture.

APPLICATION:

All hardware shall be fitted before doors and frames are finished and applied only after such finishing is completely done.

HARDWARE SCHEDULE:

	<u>Listed Manufacturer or its equivalent</u>
Door - 1	
1 Pr. Butts BB1191 US 26D 4½ x 4½ NRP	Hager
1 Only Cylinder Lock B464P 626	Schlage
Door - 2	
1 Pr. Butts BB1191 US 26D 4½ x 4½ NRP	Hager
1 Only Deadbolt B462P 626	Schlage
1 Only Push Plate 70 6x16 US32D	Rockwood
1 Only Pull 8103-10" US32D	Ives
1 Only Magic-Access elec. Dr. operator w/inter. & ext. m/contactors	Stanley
1 Only Threshold 813 + sweep Alum. X Length Req.	National Guard
1 Set Weather stripping 705	National Guard
Door - 3	
1 Pr. Butts BB1191 US 26D 4½ x 4½ NRP	Hager
1 Only Push Plate 70 6x16 US32D	Rockwood
1 Only Pull 8103-10" US32D	Ives
1 Only Door Closer DS7600 Alum.	Dorma
Door - 4	
1 Pr. Butts BB1191 US 26D 4½ x 4½ NRP	Hager
1 Only Push Plate 70 6x16 US32D	Rockwood
1 Only Pull 8103-10" US32D	Ives
1 Only Door Closer DS7600 Alum.	Dorma
Door - 5	
1 Pr. Butts BB1191 US 26D 4½ x 4½ NRP	Hager
1 Only Passage Lock D10S/Rhodes 626	Schlage
1 Only Cylinder Lock B464P 626	Schlage
1 Only Door Closer DS7600 Alum.	Dorma

END OF SECTION 08700

SECTION 08800 – GLASS AND GLAZING

PART 1 - GENERAL

DESCRIPTION OF WORK:

Furnish all labor, material, equipment and services necessary to install and complete the glass and glazing work as herein specified and/or indicated on the drawings.

It is the objective of this contract to renovate the old Elsayh jail into ADA accessible toilets for the museum above.

PART 2 – PRODUCTS

MATERIALS:

Glass to be used when repairing glazing in the old jail:

The contractor is to matching salvaged glass when replacing any damaged lights of glass.

Glazing Compound: Shall be manufactured by Pecora or equal.

Replacement Material: After completion of work, deliver replacement materials to the project site, as follows:

Furnish 10% replacement material from the same source as the materials installed.

PART 3 – EXECUTION

WORKMANSHIP:

All glass shall be accurately cut to fit openings. Panes shall be well bedded with glazing compound. Surface of compound shall be left smooth and free from tool marks.

All existing glazing compound should be removed and replaced with new prior to repainting.

All broken glass shall be removed on completion and replaced with whole lights.

Finished installation shall be watertight.

END OF SECTION 08800

SECTION 08840 – GLAZING PLASTIC

PART 1 - GENERAL

DESCRIPTION OF WORK:

Furnish all labor, material, equipment and services necessary to install and complete the plastic glazing work as herein specified and/or indicated on the drawings.

It is the objective of this contract to renovate the old Elsay jail into ADA accessible toilets for the museum above. All windows and glass shall be retained. A new 1/4" polycarbonate sheet of obscure gray plastic shall be screwed to the interior of the window frames for privacy using round head brass screws and washers for the ease of removal to clean the windows.

The types of glazing plastic required include the following:

Obscure cast polycarbonate-glazing plastic.

Glass and Glazing: Section 08800

SUBMITTALS:

Samples, Glazing Plastics:

Submit samples of type and color of glazing plastic required for Architect's review of samples would be for color and texture only. Compliance with other requirements is the exclusive responsibility of the Contractor.

PART 2 – PRODUCTS

MATERIALS:

Plastic: 1/4 " cast polycarbonate, 13,500 psi flexural strength 240 degree F (116 degree C) allowable continuous service temperature, 16 ft-lb Izod impact strength.

Color: Provide gray or bronze tinted obscure sheet with 25% to 30% light transmittance, ASTM D 1003. Color as selected by Architect from manufacture's standard colors.

Manufactures of Plastic: One of the following:

Lexan 9030; General Electric Co.

Tuffack CM-2; Rohm and Haas

PART 3 – EXECUTION

INSTALLATION:

Refer to Section 08800 "Glass and Glazing".

END OF SECTION 08840

SECTION 09250 – GYPSUM DRYWALL

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of the gypsum drywall work is shown on the drawings and in schedules, and is hereby defined to include gypsum board work with a tape-and-compound joint treatment system known as "drywall finishing" work.

The types of work required include the following:

- Install new ½" thick gypsum drywall walls when on wood studs or furring.
- Install Durock backing where ceramic tile is to be installed as a finish.
- When gypsum drywall is installed over wood studs use drywall screws.
- Finish drywall with drywall finishing compound (joint tape-and-compound treatment).

QUALITY ASSURANCE:

Fire-Resistance Rating: Where work is indicated for fire-resistance ratings, including those required to comply with governing regulations, provide materials and installations identical with applicable assemblies, which have been tested and listed by recognized authorities, including UL and A.I.A.

Industry Standard: Comply with applicable requirements of GA-216 "Application and Finishing of Gypsum Board" by the Gypsum Association, except where more detailed or more stringent requirements are indicated including the recommendations of the manufacturer.

Allowable Tolerances: ⅛" of offsets between planes of board faces, and ¼" in 8'-0" for plumb, level, warp and bow.

PART 2 – PRODUCTS

GYPSUM BOARD PRODUCTS:

General: To the extent not otherwise indicated, comply with GA-216, as specified and recommended.

Exposed Gypsum board: (also known as gypsum wallboard) Regular type with tapered long edges.

Sheet Size: Maximum length available which will minimize end joints.

Thickness: ½", except where otherwise indicated

TRIM ACCESSORIES:

General: Manufacturer's standard galvanized steel beaded units with flanges for concealment in joint compound, including corner beads, edge trim and control joints.

Exterior Trim: Zinc-alloy, except as otherwise indicated.

JOINT TREATMENT MATERIALS:

General: ASTM C 475; type recommended by the manufacturer for the application indicated, except as otherwise indicated.

Joint Tape: Perforated type.

Joint compound: Ready-mixed vinyl-type for interior use.

Grade: A single multi-purpose grade, for entire application.

MISCELLANEOUS MATERIALS:

General: Provide auxiliary materials for gypsum drywall work of the type and grade recommended by the manufacturer of the gypsum board.

Gypsum Board Fasteners: Comply with GA-216.

PART 3 – EXECUTION

INSPECTION:

Installer must examine the substrate and the spaces to receive gypsum drywall, and the conditions under which gypsum drywall is to be installed; and shall notify the Contractor, in writing, of conditions detrimental to the proper and timely completion of the work. Do not proceed with the installation until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

GENERAL GYPSUM BOARD INSTALLATION REQUIREMENTS:

Pre-Installation Conference: Meet at the project site with the installers of related work and review the coordination and sequencing of work to ensure that everything to be concealed by gypsum drywall has been accomplished, and that chases, access panels, openings, supplementary framing and blocking and similar provisions have been completed.

General Standards: In addition to compliance with GA-216, comply with manufacturer's instructions and requirements for fire-resistance ratings, whichever is most stringent.

Install ceiling boards in the direction and manner which will minimize the number of end-butt joints, and which will avoid end joints in the central area of each ceiling. Stagger end joints at least 2'-0".

SPECIAL GYPSUM BOARD APPLICATIONS:

Single-Layer Ceilings: Install exposed gypsum board prior to wall/partition board installation.
Fasten with screws.

INSTALLATION OF DRYWALL TRIM ACCESSORIES:

General: Where feasible, use the same fasteners to anchor trim accessory flanges as used to fasten gypsum board to the supports. Otherwise, fasten flanges by nailing or stapling in accordance with manufacturer's instructions and recommendations.

Install metal corner beads at external corners of drywall work.

Install metal edge trim whenever edge of gypsum board would otherwise be exposed or semi-exposed. Provide type with face flange to receive joint compound. Install L-type trim where work is tightly abutted to other work, and install special kerf-type where other work is kerfed to receive long leg of L-type trim. Install metal control joint (beaded-type) where indicated.

INSTALLATION OF DRYWALL FINISHES:

General: Apply treatment at gypsum board joints (both directions, flanges of trim accessories, penetrations, fasteners, heads, surface defects and elsewhere as required to prepare work for decoration. Prefill open joints and rounded or beveled edges, using type of compound recommended by manufacturer.

Apply joint compound in 3 coats (not including prefill of openings in base), and sand between last 2 coats and after last coat.

PROTECTION OF WORK:

Installer shall advise Contractor of required procedures for protection of the gypsum drywall work from damage and deterioration during the remainder of the construction period.

END OF SECTION 09250

SECTION 09300 – TILE WORK

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of tile work is shown on the drawings and in schedules.

QUALITY ASSURANCE:

Manufacturing Standards: Furnish tile conforming to Standard Grade requirements of TCA A137.1.

Manufacturer: Provide products as manufactured by the following:

American Olean
Dallas Ceramic Company
Summitville Tiles, Inc.
United States Ceramic Tile Company
International American Ceramics, Inc.
Windburn Tile Manufacturing Company

SUBMITTALS:

Submit samples of manufacturer's standard colors of tile for selection by Architect.

PART 2 – PRODUCTS

Walls: Glazed 4-1/4"x 4-1/4" "Standard Grade" ceramic wall tile, color as selected by the Architect from manufacturer's complete color line.

Floors: Quarry Tile: 6"x 6" "Standard Grade", square-edged.

Trim Shapes: Same material, size, color, and finish as field tile.

Walls: Out-corners round. Walls: In-corners square.
Floors: Cove base were required.
Bull nose tile where tile terminates.

Cement Mortar and Grout: ANSI A 108.1, 108.2 and 108.3 materials and installation.

Latex-Portland Cement Mortar: Latex-modified Portland cement thin-set mortar complying with ANSI A118.4.

Latex Grout: Factory-blend of Portland cement and latex additives.

Flexible Grout Additive: L & M-Surco Co. or its equivalent

PART 3 – EXECUTION

INSPECTION:

Installer must examine the areas and conditions under which tile work is to be installed and notify the Contractor in writing of conditions detrimental to the proper and timely completion of the work, do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

INSTALLATION:

General: Comply with ANSI standard installation specifications A108.1 through A108.7 except as otherwise indicated. Maintain minimum temperature limits of 45 to 100 degrees and installation practices as recommended by proprietary mortar and grout materials manufacturer.

Extend tile work into recesses and under equipment and fixtures, to form a complete covering without interruptions, except as otherwise shown, Terminate work neatly at obstructions, edges and corners without disruption of pattern or joint alignments. Comply with the manufacturer's instructions for mixing and installation of proprietary materials.

Neutralize and seal substrates in accordance with mortar or adhesive manufacturer's instructions.

Setting Mortar:

ANSI A108.1 (Reference TCA Latex-modified Portland cement thin-set mortar)

Jointing Pattern: Unless otherwise shown, lay tile in grid pattern with joints aligned with adjoining tiles on floor, base, walls, and trim. Layout tile work and center tile fields both directions in each space or on each wall area. Adjust to minimize tile cutting. Provide uniform joint widths, unless otherwise shown.

Grout: Use latex-Portland cement grout for floor and wall tile.

Cleaning: Upon completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.

Unglazed tile may be cleaned with acid solutions only when permitted by the tile and grout manufacturer's printed instructions, but not sooner than fourteen (14) days after installation. Protect metal surfaces, cast iron and vitreous plumbing fixtures from efforts of acid cleaning. Flush the surface with clean water before and after cleaning.

Prohibit all foot and wheel traffic from using tiled floors for at least seven (7) days.

END OF SECTION 09300

SECTION 09900 – PAINTING

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of painting work is shown on the drawings and schedules, and as herein specified.

The work includes painting and finishing of interior and exterior exposed items and surfaces throughout the project, as listed below unless otherwise indicated.

Exterior Restoration:

Paint all doors, windows and trim shown on the drawings.

Interior Renovation:

Crawl Space #001:

No painting or finishing required.

Women's Toilet #002:

Varnish doors, paint hollow metal doorframes, windows, frames, trim, baseboards and drywall walls 3-coats of varnish or linseed oil paint.

Exposed masonry walls, existing wood ceiling and ceramic tile are not to be finished.

Vestibule #103:

Varnish doors, paint hollow metal doorframes, trim, baseboards and drywall walls 3-coats of varnish or linseed oil paint.

Exposed masonry walls and existing wood ceiling are not to be finished.

Janitor #004:

Varnish doors, paint hollow metal doorframes, baseboards and drywall walls 3-coats of varnish or linseed oil paint.

Exposed masonry walls and existing wood ceiling are not to be finished.

Men's Toilet #005:

Varnish doors, paint hollow metal doorframes, windows, frames, trim, baseboards and drywall walls 3-coats of varnish or linseed oil paint.

Exposed masonry walls, existing wood ceiling and ceramic tile are not to be finished.

PAINTING NOT INCLUDED:

Unless otherwise indicated, shop priming of ferrous metal items and fabricated components are included under their respective trades. Unless otherwise indicated, painting not required on surfaces of concealed areas. Do not paint any moving parts of operating units.

QUALITY ASSURANCE:

Restoration Specialist:

New work must be performed by a firm with not less than three (3) years successful experience in painting and graining work on restoration projects employing skilled personnel for execution of the work.

Job Mock-Ups: Prior to start of paint restoration, conduct the following procedures. Obtain Architect's acceptance of visual qualities before proceeding with the work.

DELIVER AND STORAGE:

Deliver materials to job site in new, original and unopened containers bearing manufacturer's name, trade name, and label analysis. Store where indicated in accordance with manufacturer's instructions.

PROTECTION:

Protect work of other trades. Correct any painting related damages by cleaning, repairing or replacing, and refinishing, as directed by Architect.

PART 2 – PRODUCTS

MATERIALS:

COLORS AND FINISHES:

Surface treatments and finishes are indicated in the "schedules" of the Contract Documents. Prior to beginning work, the Architect will furnish color chips for surfaces to be painted.

Color Pigments: Pure, non-fading, applicable types to suit the substances and service indicated.

Paint Coordination: Provide finish coats, which are compatible with prime paint, used. Notify the Architect in writing of any anticipated problems using specified coating systems with substrates primed by others.

MATERIAL QUALITY:

Provide the best quality grade of the various types of coatings as regularly manufactured by acceptable paint materials manufacturers. Materials not displaying the manufacturer's identification as a standard, best-grade product will not be acceptable.

Provide paint products by the following manufacturer:

Old Village Paint Inc. (215) 654-1770
or its equivalent

Provide undercoat paint produced by the same manufacturer as the finish coats. Use only thinners approved by the paint manufacturer, and use only within recommended limits.

EXTERIOR PAINT SYSTEMS:

Provide the following paint systems for the various substrates, as indicated:

Wood:

- EPS-1: Painted Semi-Gloss Finish
- 1st Coat - Linseed Oil based Ext. Primer
- 2nd Coat - Linseed Oil based House Paint
- 3rd Coat - Linseed Oil based House Paint

INTERIOR PAINT SYSTEMS:

Provide the following paint systems for the various substrates, as indicated.

Gypsum Drywall Systems:

- IPS-1: Flat Finish
- 1st Coat - Linseed Oil based Primer
- 2nd Coat - Linseed Oil based Paint
- 3rd Coat - Linseed Oil based Paint

Painted Hollow metal frames and Woodwork:

- IPS-2: Semi-gloss Finish
- 1st Coat - Linseed Oil based Primer
- 2nd Coat - Linseed Oil based Paint
- 3rd Coat - Linseed Oil based Paint

Natural Finish Woodwork:

- IPS-4: Natural Wood Doors
- 1st Coat - Stain
- 2nd Coat - Gloss Varnish
- 3rd Coat - Dead Flat Varnish
- 4th Coat - Lemon Oil Furniture Polish

Materials such as linseed oil, shellac, turpentine, etc., shall be pure, of the highest quality and bear identifying label on the containers.

PART 3 - EXECUTION

INSPECTION:

Applicator must examine the areas and conditions under which painting work is to be applied and notify the Contractor in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Applicator.

Starting of painting work will be construed as the Applicator's acceptance of the surfaces and conditions within any particular area.

Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions otherwise detrimental to the formation of a durable paint film.

PREPARATION:

All surfaces shall be clean, dry and in suitable condition to receive the finish. Perform all necessary cleaning, sanding and dusting of surfaces required to put in perfect condition to receive the finish.

Fill nail holes, cracks and seams with pure linseed oil, putty or with lead whiting putty, colored to match finish work. Apply putty after first coat of prime coat is dry.

Prime or seal wood required to be job-painted immediately upon delivery to job. Prime edges, ends, faces, undersides, and backsides of such wood.

Remove all hardware, hardware accessories, and similar items in place and not to be finish-painted. Following completion of painting of each space or area, re-install the removed items by workmen skilled in the trades involved.

The following system of surface preparation shall be followed:

Interior Wood Trim and Doors that was painted (original):

Wash with TSP then sand so new finish will be a first class job.

Refinish with a three (3)-coat paint or a linseed oil finish.

Interior Wood Trim (new):

Sand to a smooth, even and clean surface; remove all dirt, oil, extruded sap and other foreign substances.

Finish with a three (3)-coat paint finish or a linseed oil finish.

Exterior Wood Trim that was painted (original):

Sand to a smooth, even and clean surface; remove all dirt, oil, extruded sap and other foreign substances.

Finish with a three (3)-coat paint finish.

Exterior Wood Trim (new):

Back seal all new woodwork prior to its installation.

Sand to a smooth, even and clean surface; remove all dirt, oil, extruded sap and other foreign substances.

Finish all with a three (3)-coat paint finish.

APPLICATION:

Apply all paint using skilled, experienced mechanics under competent and constant supervision using round brushes. Apply painting and finishing materials in accordance with the manufacturer's directions. Use round brushes and techniques best suited for the material and surfaces to which applied.

Apply additional coats when undercoats, stains, or other conditions show through final paint coat, until paint film is of uniform finish, color, and appearance.

The application of paint to all surfaces included in this specification shall be accomplished with quality round brushes, in even, thorough coats, without runs, sags, clogging, laps or other blemishes.

All surfaces shall be lightly sanded between coats.

Paint and/or seal all surfaces and edges, including top and bottom of all doors.

Do no exterior painting or finishing when surfaces are wet or damp or during rainy weather. Do no painting or finishing when the surrounding temperature is below 50 degrees F.

Do no painting or finishing on plaster surfaces when the moisture content exceeds 5.5 percent. All coats, regardless of materials used, shall be completely dry before applying succeeding coats.

Provide all scaffolding, ladders, staging, etc., required for the proper execution of work. Place same so that interference with the work of others is avoided. Perform painting work specified herein, in general, after others have completed their work or in such manner that the painting will not interfere with the work of others.

Protect all surfaces not included in the specific area being painted, including objects inside and outside of building, sidewalks, drives, floors, etc., from damage or injury by employees, misapplication of paint products or to other operations in connection with work under this Section.

Keep storage area neat and clean. Remove oily rags, waste, etc., from building every night and take every precaution to avoid the danger of fire.

Examine all surfaces to be painted. Notify Architect of any conditions, which will adversely affect the work. Do not start work until such conditions have been corrected. After all other trades have finished their work, touch-up any and all damaged paint surfaces in first-class condition.

COLOR SELECTION:

If requested, prepare sample panels of each color and finish for approval before beginning the work.

END OF SECTION 09900

SECTION 10160 – SOLID PLASTIC TOILET PARTITIONS AND URINAL SCREENS

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of toilet partitions, is shown on the drawings.
The types of solid plastic partitions include the following:

- Floor-supported partitions for toilets.
- Wall-hung urinal screens.

QUALITY ASSURANCE:

Manufacturers: Provide solid plastic toilet partitions as manufactured by one of the following:

- Santana Products Company.
- Ryno Systems Inc.
- Knickerbocker Partition Corporation
- Columbia Partitions, Inc.
- Ampeo Products Inc.

SUBMITTALS:

Shop Drawings:

Submit shop drawings for the fabrication and erection of toilet partition assemblies.

Samples:

Submit samples of each finish and color. Samples will be reviewed for color, texture, and surface reflectivity only.

PART 2 – PRODUCTS

MATERIALS:

Solid plastic high density polymer resin compound: ASTM-E84

FABRICATION:

Toilet partitions, shower compartments, shower seats, dressing room benches shall be 1" thick, with all edges machined to a radius of .250" and all sharp corners removed.

All dividing panels and doors shall be 55" high, and mounted 14" above finished floor.

All pilasters shall be 82" high and fastened to 3" high stainless steel shoes by means of theft-proof stainless steel sex bolts.

SOLID PLASTIC TOILET PARTITIONS AND URINAL SCREENS

Toilet compartments shall be overhead braced type. Urinal screens shall be wall hung as indicated. Units shall be constructed of high density solid polymer plastic. Hardware shall be stainless steel hinges with latch and keeper chrome plated zamac, extruded aluminum full panel height, wall, panel and pilaster brackets, stainless steel shoes and heavy duty aluminum no-grip headrail, all thru-bolted.

ACCESSORIES:

Furnish for each door as follows:

Door stops: Manufacturer's standard unit, rubber-tipped. (Out swing doors only)

Coat Hook and Bumper: Manufacturer's standard unit, rubber-tipped.

Door Pull: Manufacturer's standard.

Finish: Manufacturer's standard; colors as selected by Architect from manufacturer's standard colors.

PART 3 – EXECUTION**INSPECTION:**

Installer must examine the areas and conditions under which toilet partitions and related items are to be installed and notify the contractor in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

INSTALLATION:

Installation: Install partitions rigid, straight, plumb and level in accordance with manufacturer's printed instructions. Set units with not more than 1/2" between pilasters and panels, and not more than 1" clearances between panels and walls.

Hardware Adjustments: Adjust and Lubricate hardware for proper operation after installation.

Set hinges on in-swing doors to hold doors open approximately 30 degrees from the closed position when unlatched.

Set hinges on out-swing doors to return to the fully closed position.

Wall-Mounted Screens: Attach with heavy-duty concealed anchoring devices, including wall channels, wall plates and studs as recommended by manufacturer.

Cleaning and Final Adjustments: Perform final adjustments to leveling devices, door hardware, and other operating parts. Clean exposed surfaces and touch-up minor finish imperfections using materials and methods recommended by partition manufacturer.

Replace damaged units which cannot be satisfactorily field repaired, as directed by Architect.

SOLID PLASTIC TOILET PARTITIONS AND URINAL SCREENS

WARRANTY:

Provide manufacturers standard solid plastic products ten (10) year warranty against breakage, corrosion or delamination.

END OF SECTION 10160

SECTION 10800 – TOILET ACCESSORIES

PART 1 - GENERAL

DESCRIPTION OF WORK:

The extent of each type of toilet accessory is shown on the drawings and schedules.

The type of toilet accessories required include the following:

- Mirrors
- Toilet tissue dispenser
- Grab bars
- Electric Hand dryer

QUALITY ASSURANCE:

Inserts and Anchorage's: Furnish inserts and anchoring devices which must be set in concrete or built into masonry; coordinate delivery with other work to avoid delay.

Accessory Locations: Coordinate accessory locations with other work to avoid interference and to assure proper operation and servicing of accessory units.

Products: Provide products of the same manufacturer for each type of accessory unit and for units exposed in the same area.

Manufacturer: Provide toilet accessories as manufactured by the following or other manufacturers with equivalent products:

Bobrick Washroom Equip, Inc.
1-314-962/8960
or its equivalent

SUBMITTALS:

Setting Drawings: Provide setting drawings, templates, instructions and directions for installation of anchorage devices in other work.

PART 2 – PRODUCTS

MATERIALS:

Stainless Steel: AISI Type 302/304, with polished No. 4 finish, 22 gage minimum, unless otherwise indicated.

Brass: Leaded and unleaded, flat products, FS QQ-B-613, Rods, shapes, forgings, and flat products with finished edges, FS QQ-B-626.

Sheet Steel: Cold rolled, commercial quality ASTM A 366, 20-gage minimum, unless otherwise indicated. Surface preparation and metal pretreatment as required for applied finish.

Galvanized Steel Sheet: ASTM 527, G60.

Chromium Plating: Nickel and chromium elector-deposited on base metal, ASTM B 456, Type SC 2.

Galvanized Steel Mounting Devices: ASTM A 386, hot-dip galvanized after fabrication.

Fasteners: Screws, bolts, and other devices of same material as accessory unit or of galvanized steel where concealed.

FABRICATION:

General: Stamped names or labels on exposed faces of toilet accessory units are not permitted, except where otherwise indicated. Wherever locks are required for a particular type of toilet accessory, provide same keying throughout project. Furnish two keys for each lock.

Surface-Mounted Toilet Accessories, General: Except where otherwise indicated, fabricate units with tight seams and joints, exposed edges rolled. Hang doors or access panels with continuous piano hinge or minimum of two 1-1/2" pin hinges of same metal as unit cabinet. Provide concealed anchorage wherever possible.

Recessed Toilet Accessories, General: Except where otherwise indicated, fabricate units of all welded construction, without mitered corners. Hang doors or access panels with full-length stainless steel piano hinge. Provide anchorage, which is fully concealed when unit is closed.

TOILET ROOM ACCESSORIES:

Proprietary product name of Bobrick and Renovators Supply have been specified as standards. Contractor may submit equivalent supplier for approval.

Mark	Type	Manufacturer	Number
Men's Toilet #105:			
1	Mirror	Bobrick	B-290-1624 (bottom 3'-4" A.F.F.)
2	Hand Dryer	Bobrick	B-700 (sensor activated mount 44" A.F.F.)
3	Grab bar	Bobrick	B-6206 x 36" lg. (mount 2'-9" A.F.F.)
4	Grab Bar	Bobrick	B-6206 x 48" lg. (mount 2'-9" A.F.F.)
5	T.T. Holder	Bobrick	B-2740 (center 1'-7" A.F.F.)
6	Ash Tray	Bobrick	B-260 (wall urn)
	Bottled Liquid Soap		By Owner
Women's Toilet #102:			
1	Mirror	Bobrick	B-290-1624 (bottom 3'-4" A.F.F.)
2	Hand Dryer	Bobrick	B-700 (sensor activated mount 44" A.F.F.)
3	Grab bar	Bobrick	B-6206 x 36" lg. (mount 2'-9" A.F.F.)

TOILET ACCESSORIES

4	Grab Bar	Bobrick	B-6206 x 48" lg. (mount 2'-9" A.F.F.)
5	T.T. Holder	Bobrick	B-2740 (center 1'-7" A.F.F.)
7	S.N. Disposal	Bobrick	B-353 (mount 34" A.F.F.)
8	Baby Changing	Koala Bear	Horizontal Design
	Bottled Liquid Soap		By Owner

PART 3 – EXECUTION**INSPECTION:**

Installer must examine the areas and conditions under which toilet accessories are to be installed and notify the Contractor in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

INSTALLATION:

Install toilet accessory units in accordance with manufacturers instructions, using fasteners, which are appropriate to substrate and recommended by manufacturer of unit. Install units plumb and level, firmly anchored in locations indicated. Use concealed fastenings wherever possible.

Install exposed mounting devices and fasteners finished to match the accessories.

Provide theft-resistant fasteners for all accessory mountings.

Grab bars shall be installed to sustain a dead weight of 250 pounds for five (5) minutes.

END OF SECTION 10800

SECTION 15000 – MECHANICAL GENERAL CONDITIONS

GENERAL:

All work done under this contract is subject to the General conditions, and General Requirements, which become a part of these specifications, and this Contractor will be responsible for it.

The Mechanical Contractor, hereafter referred to as "this Contractor", shall furnish all items of new material necessary to make a complete installation in accordance with the following specifications and accompanying plans. This contractor shall examine carefully all plans and Specifications for this project and carry on work in such a manner as not to delay or interfere with other contractors. There must be a competent foreman directing the work at all times, and all work will be subject to the approval of the Architect.

DESCRIPTION OF WORK:

Work covered under this section of the specifications consists of all material, labor, equipment and services necessary for completion of systems as called for in these specifications, or indicated on the drawings. The work shall include, but not necessarily be limited to furnishing, furnishing and installing and/or installing the following:

Plumbing
HVAC

As described in Sections 15400 and 15600 and shown on the plans.

ACCURACY OF DATA:

The information given herein and on the plans is as exact as could be secured, but its extreme accuracy is not guaranteed. This Contractor must, therefore, examine the locations carefully and verify all measurements, distances, levels, pipe sizes, etc., before starting work. Verify all utility locations, depths, etc., before starting work. This Contractor shall be responsible for property damage or personal injury caused by his negligence in properly locating public or private utilities.

Provide all necessary offsets, raises, or drops in piping as required by conditions at building, whether specifically shown on the plans or not.

This Contractor shall consult Architectural, Structural, Mechanical, and Electrical Plans for space allotments and coordination. Any work installed by this Contractor without regard for others work and a conflict results that must be changed; this shall be done without cost to the Owners.

This Contractor is to cooperate to the fullest extent with other contractors on the work, and shall so plan and execute his work so as to have as little interference as possible with other contractors.

ERECTION OF APPARATUS:

The work shall be done under the personal supervision of this Contractor and must be in charge of a competent foreman who shall layout all work. Should any difficulty arise in the installation of the system, this Contractor shall promptly report it to the Architect.

All valves, specialties and equipment must be placed so as to permit easy operation and examination. Special care must be taken to provide room for removing the inner parts of all specialties.

EQUIPMENT LOCATION:

The location and size of equipment indicated on the plans or herein specified shall be located and installed accordingly and in no event are locations of any lines or size of same, or locations of any equipment or apparatus, to be changed unless by written consent of the Architect. All lines or equipment not shown, but specified or required, shall be run or located as directed on the job.

TOOLS AND SCAFFOLDING:

This contractor is to furnish all labor, apparatus, utensils, and scaffolding necessary for the due and faithful performance of the work according to the intent and meaning of these specifications and drawings, which accompany them.

DRAWINGS AND SPECIFICATIONS:

The drawings indicate diagrammatically the desired arrangement and approximate location of the items of equipment, piping, and ductwork. Certain runs of piping have been distorted to avoid confusion. The entire installation is to be made in such a manner to avoid obstructions, preserve headroom, keep openings and passageways clear, and to overcome local difficulties and interference with structural conditions and with other trades.

This Contractor shall verify measurements, elevations, dimensions, equipment space requirements, etc.

This Contractor shall assume responsibility for proper installation of equipment in the space available. Work, which may be specified but not completely detailed on drawings, shall be installed as dictated by common practice or as directed by the Architect.

The Architectural, Mechanical, and Electrical plans and specifications shall be considered as mutually explanatory and complementary and any work called for by one and not by the other shall be performed as though required by both.

ACCESS TO EQUIPMENT:

This Contractor shall use caution in the erection of all piping, ductwork and equipment to allow adequate space around it for maintenance of equipment parts. All specialties, filters, motors, etc., shall be easily accessible. This Contractor shall furnish all access panels to the General Contractor for installation. Panels shall be types as required by construction and approved by the Architect. Minimum size of access panels shall be as approved by the Architect.

TESTING:

All testing shall be conducted in accordance with the instructions and requirements of the Plumbing, Heating, Air Conditioning, and Electrical Sections.

REPAIR AND REPLACEMENT:

In all paved or improved streets and sidewalks, the surface of the excavations shall be finished with the same kind of pavement or improvement that was removed in excavating the trench, and so that the underlying course, as well as the finished surface, shall conform to the remainder of the roadway or sidewalk.

NOISE AND VIBRATION:

It is the intention of these plans and specifications to provide a system free of objectionable noise and vibration.

MANUALS:

Upon completion, this subcontractor shall prepare and submit operating manuals to the Owner, which shall include:

- As-built drawings.
- Shop drawings.
- Equipment warranties.
- Operation and maintenance instructions.

CLEANING:

All fixtures, piping, and other equipment furnished or installed by this contractor shall be thoroughly cleaned at the completion of his work.

CUTTING, PATCHING AND REPAIRING:

This Contractor shall include all cutting required for and resulting from the installation of his work except where noted otherwise. All cutting to be verified with General Contractor before beginning. General Contractor shall patch and repair the holes and restore surface finish.

REMOVAL OF RUBBISH:

Under no circumstances shall rubbish be allowed to accumulate in the building or on the premises. All dirt and rubbish resulting from the work shall be removed from time to time and as often as directed by the General contractor.

EXCAVATION AND BACKFILL:

This Contractor shall do all excavation and backfill required for completion of his work; trenches must be dug to a line and the bottom cleaned and shaped to provide support of the pipe through its entire length.

Bracing shall be provided as necessary to maintain excavations.

As soon as underground work has been completely installed and tested, all excavations shall be backfilled with granular fill to 6" above the pipe. At Contractor's option, the balance of

MECHANICAL GENERAL CONDITIONS

excavation may be organic free; clean earth to grade or granular fill to within 12", then clean earth. If backfill is other than granular, Soils Engineer must certify it.

Backfill below concrete or asphalted slabs shall be granular fill to paving base.

MATERIALS AND WORKMANSHIP:

Only new, clean, and perfect fixtures, piping, materials and supplies of latest design and manufacture shall be incorporated in the work in order to assure systems of high quality.

All work shall be done under the supervision of the Contractor who shall provide foreman to lay out all work. All work shall be laid out with due regard for the space requirements of the other contractors. Contractor shall report any conflict or difficulties in regard to the installation immediately.

Contractor shall be completely responsible for all work installed by him and shall employ only competent and experienced workmen of proper trades to perform the work harmoniously with other trades.

LEAK DAMAGE:

Contractor shall be responsible for damage to the work of other contractors, or to the building, or to its contents, etc., caused by leaks in any of the equipment installed by him through equipment or material failure or disconnected pipes, fittings or by overflows and shall make, at his own expense, all repairs to merchandise, fixtures, and equipment so damaged.

PAINTING:

All exposed piping and ductwork and all other painting of mechanical equipment shall not be a part of this contractor's work unless specifically called.

PIPE SLEEVES:

Install sleeves in connection with all piping passing through walls, slabs, partitions, or other building construction. Sleeves shall be of sufficient diameter to accommodate the full thickness of insulation where lines are covered, and the pipe only where uncovered. All sleeves installed in horizontal position through brick, stone, concrete and masonry walls shall be constructed of standard weight steel pipe, set flush with face of walls. Sleeves for lines through floors shall be #22 gauge galvanized iron or plastic, set flush with floor and ceiling unless exposed. Fill all openings around pipes with non-corrosive elastimeric sealant. Sleeves in unfinished rooms pipe shall be 1" above finish floor.

HANGERS, ANCHORS, AND GUIDES:

All piping shall be hung or supported from the building structure, etc., by means of approved hangers and supports. Piping shall be supported to maintain required grading and pitching of lines to prevent vibration, and to secure piping in place, and shall be so arranged as to provide for expansion and contraction.

The spacing of the hangers shall be not greater than 10 ft. on centers for pipe 1-1/4" and larger, 8 ft. for pipe smaller than 1-1/4".

Hangers on low temperature lines (such as chilled water refrigeration suction, etc.) shall be large enough for insulation to pass through them without breaking the insulation seal. Place heavy gauge metal supports between insulation and hanger.

MOTOR STARTERS, SWITCHES, AND ELECTRIC WORK:

The Mechanical Contractor shall provide all starters for equipment listed under this specification. Starters 1/2 HP and smaller shall be a thermal protected switch. Starters 3/4 HP and up shall be a combination magnetic starters with disconnect switches, push button stations in the cover or remotely located.

The electric contractor shall bring all main power wiring to motors and starters. The Electric Contractor shall do all temperature controls and interlocking wiring.

The HVAC Contractor shall check the electric drawings for exact electrical characteristics of electrical service on this job to all motors and furnish motors that fit available service.

The Mechanical Contractor shall provide all electrical specialties to operate his equipment.

GROUNDS:

Where grounds are required in walls, floors, or partitions for setting of equipment in this contract, they are included in this section of the specifications, together with the responsibility for the proper location of all grounds and sleeves required under this contract.

START-UP AND OPERATING INSTRUCTIONS:

Furnish and install a complete set of operating and maintenance instructions to Owner. Contractor shall notify Architect before starting any new equipment and shall request a start-up inspection.

GUARANTEE:

This Contractor, by accepting the plans and specifications and signing the contract, shall guarantee the following:

All equipment, accessories, and material furnished by him for a period of one (1) year from final acceptance (which is from date of final payment) against all defects in material and workmanship. If any equipment fails, or does not operate satisfactorily or shows undue wear, this Contractor will be notified and shall be required to remedy the defect immediately at his own expense.

All equipment will produce the results specified.

All piping must be drip tight and properly installed to be free of vibrations, pounds, or objectionable noise.

SITE INSPECTION:

Visit the site and investigate all conditions involved in the execution of the work.

MECHANICAL GENERAL CONDITIONS

Failure to fully acquaint himself with existing site conditions under which the work is to be performed will not be justification for additional compensation after award of the contract.

Should it be necessary to relocate any piping, fixture, etc., before or at the time of installation within a radius of ten (10) feet from the general location shown on the plans, this shall be done without extra charge.

END OF SECTION 15000

SECTION 15400 – PLUMBING

PART 1 - GENERAL

RELATED DOCUMENTS:

The "Mechanical General Conditions", Section 15000, International Plumbing Code, shall be a part of these specifications and shall apply as if fully recited herein.

DESCRIPTION OF WORK:

Work covered under this Section of the specifications consist of all material, labor, equipment and services necessary for a complete system as called for in these specifications, or indicated on the drawings. This work shall include, but not necessarily be limited to, furnishing, furnishing and installing, and/or installing the following:

- Install a new 1½" domestic water service
- Soil, waste and vent system.
- Domestic cold and hot water system.
- Insulation and pipe covering.
- Fixtures and trim.
- Furnish and install an aerobic waste disposal system
- Sub-soil drainage pipe

WORK DONE BY OTHERS:

All electric connections: Section 16000

SHOP DRAWINGS:

Submit shop drawings for the following equipment and/or materials:

- Plumbing Fixtures

TESTING:

Pressure tests all piping prior to backfill or covering. Adjust valves for proper flow to all fixtures. Test the operation of any expansion fittings. The expansion fittings should move freely, and the pipe should not bow, distort, or be restricted in linear movement.

PART 2 - PRODUCTS

DOMESTIC WATER PIPING:

Tubing - interior pipe:

- Above grade shall be Type "L" hard temper copper pipe and fittings.

- Below grade shall be Type "K" soft temper copper pipe (no fittings allowed).

Fittings and Solder for Copper Tubing:

All fittings shall be wrought copper or cast bronze solder fittings for copper tube, and shall bear manufacturer's trademark.

Solder shall be lead-free, and flux shall be #50 petrolate.

No acid core wire solder or liquid flux will be permitted.

Water Valves:

Valves shall be as manufactured by Crane Company, Jenkins Brothers, Mueller Brass Co., Walworth Co., or Nibco. All valves shall be suitable for 125 lbs. working pressure.

Valves 3/4" and smaller shall be stop and waste valves.

Valves from 1" to 3" rising stem gates valves.

Check valves shall be swing check.

Pressure Reducing Valves:

Valves shall be Watts, Spence or Nibco suitable for an upstream working pressure of 150 psi. and an adjustable reduced pressure range of 25 to 75 psi.

Unions:

All units shall be ground joints, Mueller Streamline, Nibco, or Capital Manufacturing.

Vacuum Breakers:

This Contractor shall provide vacuum breakers or approved prevention for those fixtures and equipment scheduled, shown on the drawings, and or as required by the governing authorities.

Vacuum breakers are to be as manufactured by Watts or equal.

Shock Absorbers:

This Contractor shall provide shock absorbers or approved water hammer elimination for each fixture group and equipment group scheduled, shown on the drawings, and or as required by the governing authorities.

Shock Absorbers are to be manufactured by Watts, Josam or equal.

Watts Series #15

Josam Series #7500

SANITARY WASTE AND VENT PIPING:

All sewer pipes within the building to a point 5' minimum outside of the building shall be PVC sanitary waste pipe.

Plastic Sanitary Waste and Vent Pipe:

Polyvinyl Chloride (PVC) pipe shall conform to ASTM D 2241-67.

PVC fittings shall conform to ASTM D 2466 for Schedule 40 socket type and ASTM D 2564 for solvent cement.

Polyvinyl Chloride Sewer Pipe:

All sanitary system sewer piping from 5'-0" outside the building to the existing sewers may be polyvinyl chloride.

PVC sewer pipe and fittings shall conform to ASTM D 3034-73 and ASTM D 2564 for solvent cement.

Pipe shall have factory bell ends or plain ends of Polyvinyl chloride plastic fused to the pipe and properly molded and cored to a uniform hardness and compressibility to form a tight compression joint. Joints shall conform to ASTM D 2865.

SUB SOIL DRAINAGE PIPE:

All sub-soil drainage pipe may be high density Polyethylene corrugated plastic pipe ASTM-F-405-"C" or PVC sewer pipe with drainage hole conforming to ASTM D 3034-73.

WALL HYDRANTS:

Wall hydrants shall be as manufactured by Nibco, Josam, Mueller Brass or Jenkins Brothers. Hydrants shall be equal to, Josam Hydrasan I w/vacuum breaker, 71050 series.

DRAINAGE SPECIALTIES:

Drainage specialties shall be Josam, Zurn, Plastic Oddities, Inc., or American Foundry. Proprietary product name of Josam has been specified as a standard.

Floor Drain: Similar to Josam No. 30003-5A with adjustable satin brass strainer

DOMESTIC WATER HEATERS:

Water heaters shall be (1) 20 gallon A.O. Smith electric heater or equal.

INSULATION:

Foam plastic insulation material for all domestic water piping shall have a flame spread not exceeding 25 and a maximum "C" factor of 0.45.

PLUMBING FIXTURES:

Proprietary product name of Renovator's Supply have been specified as a standard. Contractor may submit its equivalent for approval.

Women's Toilet #102

LAV-1: American Standard, White Lucerne Lavatory #0355.012, complete with carrier and concealed arms

Faucet: Delta #D2529HDF faucet with perforated grid strainer
Drain #760W

Supplies: 1/2" by 3/8" angle supplies with stops

P-Trap: 1-1/4" offset p-trap less cleanout

WC-1: American Standard, white #2234.015/020 Madera toilet, complete with #95 Olsonite open front white seat less cover, Sloan Royal #111 flush valve and bolt caps

Men's Toilet #105

LAV-1: American Standard, White Lucerne Lavatory #0355.012, complete with carrier and concealed arms

Faucet: Delta #D2529HDF faucet with perforated grid strainer

Drain #760W

Supplies: 1/2" by 3/8" angle supplies with stops

P-Trap: 1-1/4" offset p-trap less cleanout

WC-1: American Standard, white #2234.015/020 Madera toilet, complete with #95 Olsonite open front white seat less cover, Sloan Royal #111 flush valve and bolt caps

UR-1: American Standard, white 6601.012/020 Lynbrook urinal, complete with Sloan Royal 180-1 flush valve and wall hangers

Janitors Closet. #104

MS-1: Fiat #MSB-2424, size 24" by 24" by 10", molded stone mop sink, complete with 3874 drain, 3889-CC mop hanger, #830AA faucet, and 83R-AA hose and bracket.

PART 3 – EXECUTION

DOMESTIC WATER SERVICE INSTALLATION:

Install a 1½" domestic water service from the main under LaSalle Street in to Janitors Closet #004 of the building.

SEWER SYSTEM:

Install a new Norweco or Jet Aerobics waste disposal system to serve the new toilet rooms. The new waste disposal system is to drain into the ditch north of the building.

GENERAL REQUIREMENTS FOR PIPING:

All piping shall be new, of type specified. All piping shall be neatly and substantially supported without undue strains and stresses, and provisions shall be made for expansions, contraction, and structural settlement.

Domestic Water System:

All horizontal piping shall be run parallel to or at right angles to walls, and risers at right angles to floors or ceilings.

Valves:

Provide shut-off valves at each individual fixture, and at the base of all C.W./H.W. risers.

Water Hammer Protection:

Each fixture group shall be provided with a shock absorber to prevent water hammer.

Joints:

Copper pipe shall be cut square and all burrs removed. Dirt, filings, etc., shall be removed from the inside of the pipe. Pipe and fittings shall be polished before applying flux and solder.

Above ground piping shall be soldered.

Below ground piping shall be brazed AWS A 5.8.

Threads on screwed pipe shall be standard clean cut and tapered. Pipe shall be reamed of burrs and kept clean of scale, dirt, and shavings. Threads shall be made up of flaked graphite and lubricating oil or approved piping compound on the male thread only.

PVC pipe shall be cut square and all burrs, removed. Pipe and fittings shall be sealed with PVC cement and primer conforming to ASTM D 2564 and D 3132.

All connections shall be permanently gas and watertight.

Unions:

Install a union at all pipe connections to equipment, between foundation wall and house valve, install a dielectric union at all copper to galvanized or steel piping or equipment connections.

Flashing:

All pipes passing through the roof shall be flashed at the roofline. Flashing shall extend 12" beyond the pipe in all directions and shall be either lead for metal pipe or PVC for plastic pipe.

Soil, Waste, and Vent Lines:

All soil, waste and vent lines above ground shall be installed as shown on the plans. Horizontal runs shall have a minimum pitch of 1/4" per foot. Offsets, connections, etc., shall be made with 45 degree to 90-degree long turn elbows or "Y's" wherever possible.

Lines shall be securely supported at floors by approved clamps. The vent stack shall be connected to the soil stack below the lowest fixture and carried up, all individual vents being connected thereto, extending through the roof with a minimum diameter of 4" thru the roof.

Vents extending through the roof shall be a minimum of 15' from any supply fan or fresh-air intake. If necessary, the vent shall be offset to meet this requirement.

Cleanouts:

Cleanouts shall be installed at the base of each stack 36" above floor. Cleanouts shall also be installed so that all pipes may be rodded without disturbing the building structure. Cleanouts shall be in the same size as the pipe but not to exceed 4" and shall be closed with screw cover plug. Cleanouts in floor shall be flush with floor and shall have the letters "C.O." stamped in cover. Cover plates in wall shall be chrome plated set flush with walls and easily removable to get at cleanouts. The maximum distance between cleanouts in horizontal lines shall be fifty (50) feet.

Furnish and install running traps, P-traps, where shown or required. Fixtures shall have traps within 18" of the fixture.

Insulation:

Insulate all exposed water piping in areas where it may sweat or freeze.

All insulation shall be applied in accordance with manufacturer's printed instructions.

AEROBIC WASTE DISPOSAL SYSTEM:

Furnish all labor, material, equipment and incidental items necessary to complete installation of the aerated sewer system as shown on drawings and set out in specifications.

Primary settling tank shall be 1000 gallon precast concrete with access ports and "tee" connections on the influent and effluent lines.

Aerating System shall be similar and equal to the SINGULAIR Bio-Kinetic wastewater treatment system with the capacity to process 900 gallons per day as manufactured by "Norweco" and distributed by Ingram Products, Inc., Godfrey, Illinois. Tank size shall be 1000 gallons.

Piping shall be P.V.C. ASTM D-2729 in sizes shown, and perforated where called for. All piping joints shall be flexible elastomeric "push-on."

Bedding material shall be washed gravel or stone, ranging inside from 3/4 inch minimum to 4 inch maximum.

Sanitary sewer line from building, connect to aerated sewer system.

All excavation required for tanks, discharge line and common drain line as shown.

Furnish and installing all P.V.C. pipe (perforated and solid) as shown for discharge line and common drain line as shown.

Fill material shall be fine aggregate FA1 or FA6 according to Article 1003.04, for trench backfill under any pavement, floor or wall. All other fill will be soil properly compacted and graded to elevation shown on the plans.

All testing required by local or governmental agencies prior to and after installation.

Furnishing and installing all controls and control wiring as required.

Installation shall be performed by a qualified Contractor licensed to install aerated sewer systems in the County of Jersey, Illinois. Systems shall be installed per manufacturer's recommendation and in accordance with all requirements of the Village of Elsau Building Code which incorporates the provision of the Illinois Plumbing Code of 1986, the Illinois Private Sewer Disposal Code, and Jersey County Private Sewage Disposal System Ordinance.

Contractor shall deliver to the Owner a two year warranty on all equipment, installation, and shall also provide a two year service contract which shall include but not limited to proper maintenance and chemicals to keep system running properly.

This work shall be paid for separately but shall be considered part of building renovation.

GENERAL REQUIREMENTS FOR PLUMBING FIXTURES:

All fixtures shall be white unless otherwise noted. Unless otherwise indicated, all plumbing fixtures shall be furnished and installed by this Plumbing Contractor.

All fixtures shall be complete with necessary hangers, bolts, anchors, brackets, etc., and shall be properly connected to waste, vent and supplies in an absolutely rigid and first-class manner. Lavatory for wheelchair user shall be capable of withstanding 250 lb. load on front edge. Provide proper backing for each plumbing fixture requiring same at the time rough in is done

Provide through the wall nipples of cast iron or brass for the water closets and urinals.

For lavatory in handicap toilet, install trap to rear of lavatory, close to wall to avoid obstruction with wheelchair.

GENERAL REQUIREMENTS FOR WATER HEATERS:

Water heater controls shall be set to limit the temperature of the hot water of personal use to 140 degrees F.

Provide high limit energy cut-off to prevent stored water from exceeding 210 degrees F.

Provide reseating type temperature and pressure relief valves constructed, listed, and installed in accordance with ANSI 21.22.

All water heaters and water heating systems shall be valved to provide shut-off from the cold water supply system.

Water heater to have one-year tank and parts warranty.

END OF SECTION 15400

SECTION 15600 – HVAC

PART 1 - GENERAL

RELATED DOCUMENTS:

The "Mechanical General Conditions", Section 15000, shall be a part of these specifications and shall apply as if fully recited herein.

DESCRIPTION OF WORK:

Work covered under this section of the specifications consists of all material, labor, equipment and services necessary for a complete heating, ventilating, and air conditioning system as called for in these specifications, or indicated on the drawings. This work shall include, but not necessarily be limited to, furnishing, furnishing and installing and/or installing the following:

Install a complete system of supply and return air ducts to serve the new toilet rooms, these ducts are to be an extension of the existing heating and cooling system serving the museum above. In Crawl Space #001 is the horizontal furnace and cooling coil that serves the museum above.

Installation of smoke detection equipment (furnished by the alarm contractor).

Provide a complete system of ductwork, grilles, registers and dampers.

Provide all temperature control equipment.

Provide exhaust fan and install venting system for toilet room exhaust fan.

Provide filters, testing and adjusting.

Provide and install all metal fire stopping.

WORK DONE BY OTHERS:

The following items of labor and materials related to, or incidental to, the installation of the heating, ventilating, air conditioning work will be provided by others at no cost to this Contractor.

All openings in floors, walls, ceilings, and roofs over 12" in width or height. However, if this Contractor fails to provide for, or supervise the installation of sleeves and notify the General Contractor well in advance of his requirements, he shall be responsible for paying for all cutting and patching made necessary by his failure to do so.

Painting of finished work except as noted.

Doors cut short (undercutting).

All electrical power wiring for motors, required for the operation of equipment installed under this contract will be done under Section 16000.

QUALITY ASSURANCE:

Warranty in addition to Section 15000:

That all equipment will give the results of performance as outlined and specified.

That all ductwork is securely supported braced and free of all vibration, pulsation, and objectionable noise.

That each temperature control system shall maintain a temperature that is within 1½ degrees of setting.

PART 2 – PRODUCTS

PIPEWORK:

Type "ACR" hard drawn seamless copper tubing sized in accordance with manufacturer's recommendations

Fitting shall be Wrot Copper or its equivalent

Condensate drain line shall be Type "M" copper or PVC hard plastic sized in accordance with manufacturer's recommendations.

Pipe insulation 1/2" foam plastic.

DUCT MATERIAL:

Ridged spiral metal duct: Ducts shall be galvanized steel. Material shall be first quality equal to Ton-Can, Armco, guaranteed to double seam without showing fracture.

Insulated flexible duct material: Flexible ducts shall be all purpose duct insulated R-6, double ply, gray polyester vapor barrier with spiral reinforcement, flame spread not to exceed 25 and smoke development less than 50.

DUCT LINER:

Insulating: 1" thick insulation (as shown on drawings) conforming to FS HH-I5588, Form A, Class 1, with a minimum density of 3 lb./cf.

AIR DEVICES:

Duct Mounted Supply Air Registers (SAR):

Furnish and install where shown on plans heavy gauge extruded aluminum supply registers for duct mounting. Including opposed blade dampers for volume control and individually adjustable double deflection louvers for spread control. All extruded aluminum construction with Dover

white baked enamel finish, concealed attachment hardware, and 1¼" radius frame. Hart & Cooley series HVD Registers or approved equal by Anemostat, Carnes or Titus.

Exhaust Air Grilles (RAG):

Furnish and install 20-gauge steel with baked enamel prime coat finish, ½" fin spacing, 45-degree deflection horizontal fins. Anemostat Model S35HD or approved equal by Carnes, Titus, or Hart & Cooley.

PART 3 – CONSTRUCTION REQUIREMENTS

SHEET METAL WORK:

General: Provide sheet metal ducts, supports, grilles, registers, outlets, manual dampers, splitters, etc., required for a complete system of ductwork.

Metal gauges, joint fabrication, reinforcement, and supporting of ducts shall comply with latest edition of SMACNA Low Velocity Duct Construction Standards, unless specifically noted otherwise in these specifications or on the drawings. Where conflicts exist the SMACNA Standard and applicable codes, the most stringent shall apply. Form all ductwork to avoid pipes, lighting fixtures, joist, beams, trusses, etc.

All manual dampers shall be adjustable, easy in operations, and absolutely noiseless. Dampers shall be installed as shown on the drawings and/or required for proper balancing of the system.

Duct Fabrication: Fabricate and install ductwork for low velocity of less than 1500 fpm and static pressures of less than 0.10" per 100 ft. in accordance with the latest edition of the Low Velocity Duct Construction Standards published by SMACNA.

Turning Vanes to be of double walled construction with pressure loss not to exceed 0.07" @ 2000 fpm.

Manual Balancing Dampers (MBD) shall be made at least one gauge heavier than the duct where used and shall be made of two thick nesses at entering edge to present a round nose to air flow. Dampers 10" and smaller may be single blade, dampers over 10" must be opposed multi-blade with blades not to exceed 8". Each damper shall have a damper regulator; on exposed duct and on ducts above lay-in ceiling, damper regulator shall be Young Regulator 401 or equal fastened directly to duct.

Provide Ventglas or its equivalent flex connectors at discharge of all air-handling units.

Provide Manual Balancing Damper at each branch take-off. All branch take-offs shall be made at 45 degree to main trunk.

All ductwork to be constructed of galvanized sheet metal. Low pressure ductwork and fittings up to 13" diam. to be 26 ga.; duct work 14" - 22" diam. to be 24 ga.; ductwork 23" - 36" diam. to be 22 ga. Spiral Lock Seam duct with 1-1/4" x 1-1/4" x 1/8" girth reinforcing angles on 72" centers.

Insulation: All insulation, accessories and fittings shall have composite fire and smoke ratings as tested by ASTM, NFPA and U.L. to not exceed flame spread of 25, smoke development of 50. Insulate with 1" thick, 3 lb. density fiberglass, provide suitable vapor barrier, tightly seal all joints, and fasten with waterproof adhesive and mechanical fasteners, all ductwork as follows:

Supply and Return Ducts for HVAC units which run outside the conditioned space of the building, require 1" thickness. Outside air intake ducts require 1" thickness.

Insulation may be either internal or external. If external insulation is used, a sheet metal vapor barrier jacket must be provided around the insulation outside with all joints tightly sealed and caulked.

POWER AND CONTROL WIRING:

All power wiring, as well as all disconnect switches, starters, and circuit breakers, will be furnished and installed by the Electrical Contractor. This Contractor shall furnish all controls, thermostats, interlocks, relays and wiring diagrams for a complete and operating system including installation and wiring. All thermostats, control panels, and fan switches, to be mounted in locations as selected by the Architect.

REGISTERS, GRILLES, AND DIFFUSERS:

The Contractor shall furnish and install all registers, grilles, and diffusers for supply, return and exhaust air of the sizes and design shown on drawings or specified. Sizes indicate dimensions inside the border.

Registers and diffusers shall have complete metal blade volume control dampers, Registers, grilles, and diffusers shall be set with rubber or felt gaskets.

Air discharge opening shall be protected from weather, birds, and large insects; also provide a back draft damper of discharge opening.

HEAT AND SMOKE DETECTORS:

HVAC Contractor shall install for wiring by Alarm Contractor. All duct detectors furnished by Alarm Contractor.

FIELD QUALITY CONTROL:

Test and adjust all fans and air handling equipment to provide the required air volume against the actual installed system static pressure. Test and set all dampers and supply, return and exhaust devices to CFM required on drawings.

Testing and balancing to be in accordance with procedures in SMACNA Testing and Balancing Manual.

All instruments for testing shall be supplied by this Contractor.

END OF SECTION 15600

SECTION 16010 – GENERAL ELECTRIC PROVISIONS

PART 1 - GENERAL

All provisions of the General Information and the General Requirements shall govern work under this Section.

This Section supplements all sections of this Division and shall apply to all phases of work hereinafter specified, shown on the drawings, or required to provide a complete installation of electrical systems.

DESCRIPTION OF WORK:

The work covered by this Section of the Specification consists of providing all the materials, labor, equipment, and services necessary for a complete electrical installation as specified herein. Work in this section includes, but is not necessarily limited to the following items:

- Install new 200 Amp underground electric service (use existing 200 amp panel)
- Install ¾" empty conduit for telephone service from pole in alley
- New wire, and outlet boxes as required.
- Lighting fixtures, receptacles, and toggle switches.
- Cutting and patching for electrical work.
- Connect heating equipment.
- Install a fire/intrusion alarm system.

COORDINATION OF WORK:

Plan all work so that it proceeds with a minimum of interference with other trades. Inform all parties concerned of openings required for equipment or conduit required in the building construction for electrical work and provide all special frames, sleeves and anchor bolts as required. Coordinate the electrical work with the mechanical installation. Work lines and established heights shall be in strict accordance with architectural drawings and specifications. Verify all dimensions shown and establish all elevations and detailed dimensions not shown. Lay out and coordinate all work well enough in advance to avoid conflicts or interferences with other work in progress so that in case of interference the electrical layout may be altered to suit the conditions, prior to the installation of any work and without additional cost to the Owner. Conflicts arising from lack of coordination shall be this subcontractor's responsibility. All approvals required from the Engineer by this specification shall be requested through the Architect.

CODES AND STANDARDS:

Perform work in accordance with the National Electrical Code, O.S.H.A. and other applicable codes. Comply with applicable building ordinances and codes. Where the contract documents exceed minimum requirements, the contract documents take precedence. Comply with the

GENERAL ELECTRIC PROVISIONS

requirements of the applicable utility companies serving this project. Make all arrangements with the utility companies for proper coordination of the work.

Design, manufacture, testing and method of installation of all apparatus and materials furnished under the requirements of these specifications shall conform to the latest publications or standard rules of the following:

Institute of Electrical and Electronic Engineers – IEEE
 National Electrical Manufacturers' Association – NEMA
 Underwriters' Laboratories, Inc. - U.L.
 National Fire Protection Association – NFPA
 Federal Specifications - Fed. Spec.
 American Society for Testing and Materials – ASTM
 United States of America Standard Institute – USASI
 National Electrical Code – NEC
 National Electrical Safety Code – NESC
 Insulated Power Cable Engineers Association – IPCEA
 American Institute of Steel Construction – AISC
 Occupational Safety and Health Act - OSHA.

CONTRACT DRAWINGS:

The contract drawings are shown in part diagrammatic, intended to convey the scope of work, indicating the general arrangement of equipment, conduit and outlets. Follow the drawings in laying out the work and verify spaces for the installation of the materials and equipment. Wherever a question exists as to the exact intended location of outlets or equipment, obtain instructions from the Architect before proceeding with the work.

EQUIPMENT OR FIXTURES:

Equipment and fixtures shall be connected providing circuit continuity in accordance with applicable codes whether or not each piece of conductor, conduit, or protective device is shown between such items of equipment or fixtures, and the point of circuit origin.

Unless otherwise specified, equipment and materials of the same type of classification, and used for the same purpose, shall be products of the same manufacturer. Use only new, unweathered, and unused material, except as specifically noted.

MATERIALS AND EQUIPMENT FURNISHED BY OTHERS:

The electrical work includes the installation or connection of certain materials and equipment furnished by others. Verify installation details. Others will furnish foundation for apparatus and equipment unless otherwise noted or detailed.

AS-BUILT DRAWINGS:

At the completion of the job and before final payment the electrical subcontractor shall submit a set of marked-up sepias for "as-built" drawings.

SUBSTITUTIONS:

In the event the electrical subcontractor wishes to substitute equipment other than that specified, he shall apply in writing to the Engineer for permission, stating amount of credit or extra involved and provide supporting data or samples.

SPECIAL CONSIDERATIONS:

Cutting, Patching and Piercing - Obtain written permission of the Structural Engineer before cutting or piercing structural members.

Use craftsmen skilled in their respective trades for cutting, fitting, repairing, patching of plaster and finishing of materials including carpentry work, metal work or concrete work required for this work. Do not weaken walls, partitions or floor with cutting. Holes required to be cut in floors must be drilled without excessive breaking out around the holes. Patching and/or refinishing will be determined by the Architect.

Sleeves through floors and walls to be black iron pipe, or paper, flush with walls, ceilings or finished floors, sized to accommodate the raceway.

Use care in piercing waterproofing. After the part piercing the waterproofing has been set in place; seal opening and make absolutely watertight.

Provide chrome-plated spring-clipped escutcheon plates where exposed conduit passes through walls, floors, or ceilings. Cover sleeves and entire opening made for the conduit with escutcheon plates. Provide air and water-tight conduit openings through floor slabs, masonry walls, and continuous partitions. Tightly caulk space between conduit and building materials with rope and non-flammable sealant.

Seal equipment or components exposed to the weather and make watertight and insect proof. Protect equipment outlets and conduit openings with temporary plugs or caps at all times that work are not in progress.

Identification of Equipment - Provide for each piece of equipment including disconnect switches and motor starter, a plastic tape identification tag "Dymo Tape", Use tape 1/2- inch wide with color and location as directed. Clearly identify on the tape the equipment served and spell out the full name of the equipment such as "Air Handling Unit AH-1" and "Hot Water Cir. Pump P-1" in lieu of abbreviated plan references such as "AH-1" or "P-1". This requirement is if micarta nameplates are not specified in the individual equipment section.

Access to Equipment - Locate starters, switches, receptacles, and pull boxes to provide easy access for operation, repair and maintenance, and if concealed, provide access doors.

Concrete Work - The equipment base for the main switchboard shall be furnished under this contract. Also, the concrete encasement for underground service conduits, and lighting fixture bases shall be provided under this contract.

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Protection of Apparatus, Materials and Equipment - Take such precautions as necessary to properly protect all apparatus, fixtures, appliances, material, equipment and installations from damage of any kind. The Engineer may reject any particular piece or pieces of material, apparatus, or equipment scratched, dented or otherwise damaged.

Shop Drawings - The electrical subcontractor shall submit to the Architect six (6) copies of shop drawings and descriptive literature prior to manufacture for:

- Service Entrance Switchboard
- Panelboards and Safety Switches
- Wiring Devices
- Light fixtures

Operation and Maintenance Manuals - During the time of the contract and before final approval of the Electrical installation, submit to the Engineer four (4) copies of descriptive literature, maintenance recommendations from the equipment manufacturer, data of initial operation, wiring diagrams and parts list of each item of electrical equipment installed under this contract, as determined by the Engineer. Submit all manufacturer's guarantees and warranties.

Painting and Painting Preparation - Prepare all fittings, boxes, supports and panelboards, exposed for painting by removing therefrom all oil, grease and dirt. Employ the necessary precautionary methods to prevent scratching or defacing of all electrical apparatus and devices. The General Contractor shall paint all electrical equipment requiring paint.

Rust Prevention - Provide hot-dip galvanized components for ferrous materials exposed to the weather.

The electrical subcontractor shall provide excavation and Backfill - All excavating and backfilling for the electrical installation.

Tests - Provide the tests as outlined hereinafter and other tests necessary to establish the adequacy, quality, safety, completed status and suitable operation of each system.

Ground Rod Test: Immediately after installation, test driven grounds and counterpoises with a Ground Resistance Direct-Reading Single-Test Megger, utilizing the AC Fall-of-Potential Method and two reference electrodes. Orient the ground to be tested and the two reference electrodes in a straight line spaced 50 feet apart. Drive the reference electrodes five (5) feet deep. Disconnect the ground rod to be tested from other ground systems at the time of testing. The ground resistance for the electrical service shall be 15 ohms or less. Submit the results, date of test, and soil conditions, to the Engineer in writing, immediately after testing.

This subcontractor shall balance phase currents of all distribution within +/- 10 percent variation between average phase current and measured individual phase currents.

Insulation resistance between conductors and ground less than 1,000,000 ohms, unless permitted by Article 110-20 of N.E.C.

Final Corrections: Correct promptly any failure or defects revealed by these tests as determined by the Engineer. Re-conduct tests on these corrected items as directed by the Engineer.

Completion and Guarantee: The electrical subcontractor shall guarantee the entire electrical system for a period of one (1) year after final acceptance of the job, and shall make all required repairs and replacements and render free services, labor and materials during this guarantee period.

Standards: All wiring shall be minimum #12 AWG Romex with added ground wire, or #12 TW in "EMT" in areas required by code. All exposed and concealed Romex shall be run through centerline of joists only, except in cellar where no exposed wiring will be accepted.

Install equipment and materials in a neat and workmanlike manner and align, level and adjust for satisfactory operation. Install equipment so that all parts are easily accessible for inspection, operation, maintenance and repair.

Where marring or disfigurement has occurred, replace or refinish the damaged surfaces as directed and to the satisfaction of the Owner.

Provide the design, fabrication, and erection of supplementary structural framing required for attachment of hangers or other devices supporting electrical equipment.

Provide framing members of standard rolled steel shapes, A-36 steel. Provide members welded to structural members equal to the specification for the main structural member. Provide "simple beam" type framing with end connections welded or bolted for shear loads. Use cantilevers only when detailed or specifically approved by the Engineer. The Engineer's approval is required for location of supplementary framing.

Design framing members for their actual loads, with allowable stresses specified by AISC, without excessive deflection and with consideration for rigidity under vibration, in accordance with standard structural practices.

When supplementary framing is indicated, verify that dimensions are suitable for the equipment furnished. Provide additional strength when equipment furnished is heavier than that specified.

Outlet Location:

Position of Outlets - Center all outlets with regard to paneling, furring and trim. Symmetrically arrange outlets in the room. Satisfactorily correct outlets improperly located or installed. Repair or replace damaged finishes. Set outlets plumb and extend to the finished surface of the wall, ceiling or floor without projecting beyond it. Install symmetrically all receptacles, switches, and outlets shown on the wood trim, cases or store fixtures, and, where necessary, set the long dimension of the plate horizontal, or ganged in tandem.

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Mounting Heights - Center all boxes above finished floor, as follows unless otherwise shown or indicated. Other mounting heights are indicated on the drawings by detail or by a plus dimension shown adjacent to the symbol:

Flush Tumbler Switches	54"
Conv. Outlets and Similar Devices	12"
Panelboards	72" to the top
Exterior WP Convenience Outlets	24" above grade

END OF SECTION 16010

SECTION 16110 – RACEWAYS AND FITTINGS

GENERAL:

This section covers raceways and fittings.

MATERIALS:

Raceways: All raceways shall be UL listed.

Galvanized Heavy Wall Conduit: Provide zinc-coated rigid steel conduit and conduit fittings. All couplings and fittings shall be of the threaded type. Threadless fittings shall be used only when specific approval is given.

Rigid PVC Conduit: Provide heavy-wall polyvinyl chloride conduit, schedule 40. Conduit shall conform to all provisions of article 347 of the N.E.C.

Flexible PVC Conduit: Provide flexible polyvinyl chloride conduit. Conduit shall conform to all provisions of article 347 of the N.E.C.

Outlet Boxes, Pull Boxes, and Conduit Fittings: Provide outlet boxes; pull boxes and conduit fittings as described below. Catalog numbers shown are Appleton Electric Company, Steel City, National Electric Products Corporation and Raco are equally acceptable.

Outlet Boxes:

Lighting Boxes, concealed or surface	No. 40-3/4
Switch, Receptacle and Junction Boxes (exposed)	FS Series
Weatherproof or Exterior Boxes	FS Series with cast cover and neoprene gasket

Where space is limited, No. 4CS-3/4 handy boxes may be used for switch and receptacle outlets with specific approval only. Provide extension and plaster rings as required. Size outlet boxes in accordance with the allowable fill permitted by the National Electrical Code.

Pull Boxes: Provide code gauge galvanized sheet metal sized per the National Electrical Code or as shown on the drawings. Provide removable cover on the largest access side of the box unless otherwise detailed. Where cast boxes are specified, provide conduit entrances with threaded hubs. Provide stainless steel screws in all exterior locations and in wet or damp locations.

Conduit Fittings:

Gland Compression Couplings (EMT) Series TWC steel rain/concrete tight

Gland Compression Connectors (EMT)	Series TW steel un-insulated throat rain/concrete tight
Insulated Bushings (1-1/4 inch rigid steel conduit and larger)	Series BBU
Sealing Gland Assembly	OZ, Type FSK
Cast Metal Conduit Fittings	Crouse-Hinds or its equivalent, Condulets form 7 with wedge nut cover

EXECUTION:

Raceways: Install all wiring in raceways, unless otherwise indicated. In general, all underground conduits shall be PVC with galvanized heavy wall turn-ups, unless otherwise indicated. Exterior above grade conduits shall be galvanized heavy wall. Conduits located inside building shall be electrical metallic tubing installed surface. Provide liquid-tight, seal-tight for connections subject to dampness.

Continuity: Provide metallic raceways continuous from outlet to outlet, and from outlets to cabinets, junction or pull boxes. Enter and secure conduit to all boxes to provide electrical continuity from the point of service to outlets. Provide double locknut and bushing on terminals of metallic conduits.

Size: Raceways shall not be smaller than 1/2".

Raceways Exposed: Run exposed raceways in straight lines, at right angles or parallel with walls, beams or columns. **Raceways in Furred Spaces:** Install raceways in accordance with the requirements of the National Electrical Code. Do not anchor or strap conduits to the ceiling or ceiling support system without the Architect's approval.

Raceways through Roof: Where raceways penetrate the roof seal, provide suitable pitch pockets or lead flashing.

Raceways in Earth: Provide schedule 40 heavy wall PVC conduits for all raceways in earth or in contact with earth.

Straps and Hangers: Substantially support raceways by straps, suitable clamps or hangers, to provide a rigid installation. Perforated straphangers and twisted wire attachments will not be acceptable. Do not support or fasten raceways to other pipe or equipment in such a manner as to prevent their immediate inspection or removal.

Joints and Connections:

Make watertight all couplings and threaded connections in threaded conduit. Cut all joints square, ream smooth and properly thread. Fit all box connections with a minimum of two (2)

approved locknuts and one steel, plastic or fiber bushing forming an approved tight bond with box. Provide locknuts both inside and outside of the enclosure to which the conduit is attached.

Use rain tight compression type fittings for electrical metallic tubing systems and use at least one locknut on the inside of each enclosure entry.

PVC Conduits - Make watertight all couplings and connectors in conduit runs. Utilize solvent cement joints of a type approved by the manufacturer for all couplings and fittings. Provide adaptors and locknuts where conduit is attached to metal U boxes, panels, etc.

Protection: Cap raceways stubbed up, including those in cabinets, immediately upon their installation. The use of paper or rag wads will not be permitted.

General Location Requirements: All raceway runs shown are diagrammatic. Determine exact locations in the field except where dimensions are specified on the drawings.

Exterior Conduits: Install raceways not less than 24 inches below grade, or as detailed on the drawings.

Outlet Boxes and Pull Boxes: Rigidly mount all boxes and install suitable screw fastened covers. Plug open knockouts or holes in boxes with suitable blanking devices.

Install pull boxes in locations that will be accessible after completion of the construction or as shown on the drawings.

END OF SECTION 16110

SECTION 16120 – CONDUCTORS

GENERAL:

This section covers 600-volt conductors.

PRODUCTS:

All conductors and cable shall conform to UL or IPCEA as applicable. Provide recently manufactured cable, with guarantees and warranties initiated during the contract period.

Provide copper conductors with insulation rated for 600 V.

Unless otherwise specified, provide solid copper conductors Type THWN (75 degrees C. wet or dry) for all conductors No. 10 AWG and smaller.

Unless otherwise specified, provide stranded copper conductors Type THW, THWN, XHHW (75 degrees C. wet or dry) for all conductors No. 8 AWG and larger.

Open branch circuit wiring shall be plastic non-metallic sheathed cable, type "NMC" (No. 12 minimum) with bare ground wire where permitted by the NEC and local ordinances.

Power Circuits and Control Circuits: Provide single conductors throughout. Provide No. 12 AWG (minimum) copper conductors for power circuits. Provide No. 14 AWG for control circuits, unless otherwise specified or required by over current protection.

Feeders, Branch Circuits and Control Circuits: Provide NMC or single conductors in PVC areas required by code. Provide No. 12 AWG (minimum) copper branch circuit wire size. Provide No. 14 AWG for control circuits, unless otherwise specified or required by over-current protection.

Exterior Feeders: Provide Type RHW-USE conductors for service entrance conductors or feeders installed in underground raceways.

Exterior Branch Circuits: Provide Type RHW-USE conductors for branch circuits, direct, buried or installed in underground raceways.

EXECUTION

GENERAL:

Provide conductors continuous from outlet to outlet and splice only at outlet or junction boxes.

Circuit all feeders and branch circuits as shown on the drawings. Approval of the Architect is required for deviations from the plans.

Installation: Install all conductors in a single raceway at one time, insuring that conductors do not cross one another while being pulled into raceway. Leave sufficient cable at all fittings or boxes and prevent conductor kinks. Keep all conductors within the allowable tension and not exceeding the minimum-bending radius. Lubricants for wire pulling, if used, shall conform to UL requirements for the installation and raceway material.

Splicing: No splicing or joints will be permitted in either feeder or branch circuits except at outlet or accessible junction boxes. Utilize compression type solder less connectors, similar to OZ Type XWC, when making splices or taps in conductors No. 8 AWG or larger.

Utilize preinsulated connectors 3M Company "Scotchlok", or Ideal Industries, Inc. "Super Nut", for splices and taps in conductors No. 10 AWG and smaller. All other twist-on connectors shall be approved prior to installation. Also, utilize this type of connector for factory-made splices in equipment.

Pressure indent type connectors shall be submitted to the Architect for approval.

Tape all splices and joints with vinyl plastic tape. Use sufficient tape to secure insulation strength equal to that of the conductors joined.

Keep splices in accessible underground junction boxes to a minimum. Where splices are necessary, use resin splices and totally encapsulate the splice.

Conductor Termination: Provide all power and control conductors, that terminate on equipment or terminal strips, with solder less lugs or fork and flanged tongue terminals:

This type conductor termination is not required when the equipment is provided with solder less connectors.

Conductor Identification: Identify phase, circuit and voltage at each panel; pull box, junction box and switch. Provide waterproof non-metallic bands or identification tags for each conductor. All secondary service, feeder and branch circuit conductors throughout the project secondary electrical system shall be color coded as follows:

<u>120 / 240 Volts</u>	<u>Phases</u>
Black	A
Red	B
White	Neutral
Green	Ground

Where color-coded conductors are not commercially available, colored, non-aging, plastic tape may be utilized.

Color code all control wire insulation and tag each splice termination.

END OF SECTION 16120

SECTION 16134 – PANELBOARDS AND SAFETY SWITCHES**GENERAL:**

This section covers panelboards and safety switches.

Square D, General Electric or Westinghouse shall manufacture the panelboards and safety switches.

MATERIALS:

Circuit Breaker Panelboards: Furnish and install panelboards as shown on the plans and in the panelboard schedule. Panelboards shall be dead front equipped with thermal magnetic molded case circuit breakers of frame, trip ratings, and interrupting capacities, as shown on the panelboard schedule. Panelboards shall be manufactured in accordance with the latest NEMA standards and shall be listed by Underwriters' Laboratories, Inc., and bear the UL label.

Panelboard Main Bus and Main Lugs shall have current ratings as shown on the panelboard schedule. Current density shall be in accordance with Underwriters' Laboratories requirements. Bus mounting for circuit breakers shall be plug-in, and accommodate any combination of circuit breaker units without further modification. Bus bars for three-phase panelboards shall be sequence phased. Wiring lugs shall be suitable for the type conductor specified.

The circuit breakers for the 120/240-volt circuits shall be quick-make and quick-break and be trip free on overload or short circuit. Multi-pole breakers shall be common trip. The breakers shall be interchangeable in any combination of poles. Wiring terminals shall be suitable for the type conductor specified. Connections to the bus shall be stab-lok.

The gauge of the steel box enclosing the panelboard assembly shall be as specified by Underwriters' Laboratories Standards. End walls shall be removable. The size of wiring gutters shall be in accordance with Underwriters' Standards. Trims shall be code gauge steel with primer and durable ANSI 33 dark gray enamel finish. Trims shall be equipped with indicating adjustable trim clamps. Trim doors shall be equipped with spring latch and tumbler lock keyed alike. Each individual circuit shall be clearly numbered on the face of panelboard and a directory for circuit identification provided.

The short circuit rating of the panelboard shall be established by short circuit testing in accordance with NEMA Standard PB-1-1971.

Safety Switches: Safety switches shall be heavy-duty type and UL listed. Switches shall be furnished in NEMA I or 3R enclosures.

Switches shall be horsepower rated for 240 VAC operation. Switches shall have visible blades so that the operator can see the open blades when the switch is in open position. Switches shall have quick-make, quick-break operating mechanism, which shall be an integral part of the box, not the

PANELBOARDS AND SAFETY SWITCHES

cover, with positive padlocking provisions in the on and off positions. Switches shall have single cover interlock to prevent unauthorized opening of switch door in the on position.

Switches shall be heavy-duty type fusible or non-fusible in NEMA 1 or NEMA 3R enclosures.

Fusible switches shall be suitable for installation of NEMA Class RK-1 fuses.

EXECUTION:

Properly align panelboards and safety switches and adequately support independent of the connecting raceways. Provide all steel shapes and appurtenances necessary for the support of the equipment.

Where panelboards are installed during construction, place temporary covers over the openings at all times, except when work is being performed therein.

END OF SECTION 16134

SECTION 16140 -- WIRING DEVICES AND PLATES

GENERAL:

This section includes line voltage wiring devices.

See plan for manufacturer and catalog numbers of miscellaneous wiring devices.

MATERIAL:

Provide wiring devices indicated. Catalog numbers shown are Tork or Hubbell unless otherwise noted. Equal devices manufactured by Arrow Hart, Pass and Seymour or Sierra is acceptable. Provide all similar devices of same manufacturer, unless otherwise indicated. Provide devices and device plates of a color and finish specified, unless otherwise noted on the drawings.

Switches: Provide flush tumbler switches conforming to Federal Specification W-S-896C. Provide 20-amp 120/277 VAC switch rating with UL listing for tungsten lamp loads.

Single Pole (ivory) Cat. No. 1221-I

Receptacles: Provide grounding type receptacles conforming to Federal Specifications W-C-596 with the ground connection made through an extra pole. Provide receptacles as follows:

Duplex (ivory)	Cat. No. 5352-I
Duplex Weatherproof (gray)	Cat. No. 5352-GRY with Cat. No. 5221 lift cover (gray fiberglass)

Plates: Provide plates for all wiring devices. Where devices are installed in exposed fittings or boxes, use "FSK" covers. Install blank covers on all boxes without devices or fixtures of the same type as installed on devices in that room or area. Provide impact resistant smooth nylon type wall plates for all other devices.

EXECUTION:

Install all wiring devices indicated complete with cover plates.

Position of Outlets: Satisfactorily correct outlets improperly located or installed. Repair or replace damaged

Finishes: Set outlets plumb and extend to the finished surface of the wall, ceiling or floor without projecting beyond it.

END OF SECTION 16140

SECTION 16180 -- FUSES

GENERAL:

This section covers fuses for 600V or less.

Provide fuses manufactured by Busman, Gould Shawmut or Reliance Electric Company.

MATERIAL:

Provide fuses at all locations shown on the drawings and as required for supplemental protection.

All fuses shall be current limiting with 200,000 amperes interrupting capacity. Fuses rated 600 amperes or less shall be NEMA Class RK-1 or RK-5 (Standard N.E.C. dimensions).

Fuses rated 600 amperes or less for all lighting and general power circuits shall be dual-element, UL Class RK-5 time-delay type. They shall be self-protecting from extraneous heat. Busman LPN-R low peak fuse.

EXECUTION:

Fuses shall not be installed until the electrical installation is complete, including thorough cleaning, tightening of all electrical connections, inspection of all grounding conductors and a megger test for adequate insulation to ground, of all circuits.

Three (3) spare fuses (of each size installed) shall be provided and turned over to the Owner.

A fuse identification label, showing type and size, shall be placed inside the door of each switch.

END OF SECTION 16180

SECTION 16410 – ELECTRIC SERVICE

GENERAL:

This section covers the new underground electric service from the utility pole in the alley to the existing 200-amp service entrance panelboard in the Museum.

Refer to: Section 16110 for Raceways.

Refer to: Section 16120 for Conductors.

The service entrance panelboard is covered in Section 16134.

The utility delivery voltage will be 120/240V, single-phase three wire.

This subcontractor shall be responsible for verifying all details relative to the utility company's installation and termination requirements and to furnish and install all such material as required in accordance with the normal practice of the utility company involved.

MATERIAL:

Not Applicable

EXECUTION:

The utility will:

Make the final connections on the pole.

Furnish and install the meter.

The electrical subcontractor shall:

Furnish and install the secondary conduits and cables underground from the meter on the pole into the building then to the service entrance panelboard.

Make the final connections to the service entrance panelboard (coordinate this work with the utility company).

END OF SECTION 16410

SECTION 16450 – GROUNDING SYSTEM

GENERAL:

Ground all electrical systems completely and effectively, as required, by the National Electrical Code as specified hereinafter, and as shown on the drawings.

Provide all ground systems and make connections mechanically secure and electrically continuous.

Refer to: Section 16010 for Ground Tests Required.

MATERIAL:

Ground rods shall be 3/4" in diameter by 10'-0" long of copper clad steel.

Bare ground conductors shall be stranded copper of sizes as shown on the drawings.

Ground conductor connections to ground rods shall be of the exothermically fusion weld type joining copper to copper or copper to steel.

EXECUTION:

Service Entrance: At the service entrance panelboard, bond the neutral to the ground; connect the ground bus to the ground rod.

END OF SECTION 16450

SECTION 16500 – LIGHTING FIXTURES

GENERAL:

This section includes lighting fixtures, associated supports and lenses.

Refer to: Electrical drawings for all types

Fixture manufactured by Lightolier, Progress, Rejuvenation, Luraline, Halo or Prescolite will be equally acceptable.

MATERIAL:

General: The fixture manufacturers catalog numbers called out on the drawings are not to be construed as all-inclusive. The electrical subcontractor shall furnish and install all accessories or hardware required for a complete installation. Light fixtures shall be equipped with proper accessories, lenses, louvers, heat loops, reflectors, shields, hangers, clips, frames, lamps, ballasts, and other essentials for proper installation in or upon walls, ceilings or other construction features, and shall be properly painted for protection and preservation appropriate to the place installed.

All lighting fixtures shall bear the Underwriters Laboratories Labels.

Lamps: Provide lamps manufactured by Sylvania, General Electric or Phillips.

Incandescent – Unless otherwise noted, provide 120 volt lamps as recommended by the fixture manufacturer.

EXECUTION:

Properly support and align fixtures. Coordinate complete fixture installation with the building construction. Clean all lighting fixtures immediately prior to final inspection.

END OF SECTION 16500

BITUMINOUS CONCRETE SURFACE COURSE (BDE)

Effective: April 1, 2001

Revised: April 1, 2003

Replace the fourth paragraph of Article 406.23(b) of the Standard Specifications with the following:

"Mixture for cracks, joints, flangeways, leveling binder (machine method), leveling binder (hand method) and binder course in excess of 103 percent of the quantity specified by the Engineer will not be measured for payment.

Surface course mixture in excess of 103 percent of adjusted plan quantity will not be measured for payment. The adjusted plan quantity for surface course mixtures will be calculated as follows:

Adjusted Plan Quantity = C x quantity shown on the plans or as specified by the Engineer.

where C = metric: $C = \frac{G_{mb} \times 24.99}{U}$ English: $C = \frac{G_{mb} \times 46.8}{U}$

and where:

G_{mb} = average bulk specific gravity from approved mix design.

U = Unit weight of surface course shown on the plans in kg/sq m/25 mm (lb/sq yd/in.), used to estimate plan quantity.

24.99 = metric constant.

46.8 = English constant.

If project circumstances warrant a new surface course mix design, the above equations shall be used to calculate the adjusted plan quantity for each mix design using its respective average bulk specific gravity."

80050

BITUMINOUS EQUIPMENT, SPREADING AND FINISHING MACHINE (BDE)

Effective: January 1, 2005

Revise the fourth paragraph of Article 1102.03 of the Standard Specifications to read:

“The paver shall be equipped with a receiving hopper having sufficient capacity for a uniform spreading operation. The hopper shall be equipped with a distribution system to uniformly place a non-segregated mixture in front of the screed. The distribution system shall have chain curtains, deflector plates, and /or other devices designed and built by the paver manufacturer to prevent segregation during distribution of the mixture from the hopper to the paver screed. The Contractor shall submit a written certification that the devices recommended by the paver manufacturer to prevent segregation have been installed and are operational. Prior to paving, the Contractor, in the presence of the Engineer, shall visually inspect paver parts specifically identified by the manufacturer for excessive wear and the need for replacement. The Contractor shall supply a completed check list to the Engineer noting the condition of the parts. Worn parts shall be replaced. The Engineer may require an additional inspection prior to placement of the surface course or at other times throughout the work.”

80142

CONCRETE ADMIXTURES (BDE)

Effective: January 1, 2003

Revised: July 1, 2004

Revise Article 1020.05(b) of the Standard Specifications to read:

"(b) Admixtures. Except as specified, the use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted only when approved in writing by the Engineer. The Department will maintain an Approved List of Concrete Admixtures. When the Department permits the use of a calcium chloride accelerator, it shall be according to Article 442.02, Note 5.

When the atmosphere or concrete temperature is 18 °C (65 °F) or higher, a retarding admixture meeting the requirements of Article 1021.03 shall be used in the Class BD Concrete and portland cement concrete bridge deck overlays. The amount of retarding admixture to be used will be determined by the Engineer. The proportions of the ingredients of the concrete shall be the same as without the retarding admixture except that the amount of mixing water shall be reduced, as may be necessary, in order to maintain the consistency of the concrete as required. In addition, a high range water-reducing admixture shall be used in Class BD Concrete. The amount of high range water-reducing admixture will be determined by the Engineer. At the option of the Contractor, a water-reducing admixture may be used. Type I cement shall be used.

For Class PC and PS Concrete, a retarding admixture may be added to the concrete mixture when the concrete temperature is 18 °C (65 °F) or higher. Other admixtures may be used when approved by the Engineer, or if specified by the contract. If an accelerating admixture is permitted by the Engineer, it shall be the non-chloride type.

At the Contractor's option, admixtures in addition to an air-entraining admixture may be used for Class PP-1 concrete. The accelerator shall be the non-chloride type. If a water-reducing or retarding admixture is used, the cement factor may be reduced a maximum 18 kg/cu m (0.30 hundredweight/cu yd). If a high range water-reducing admixture is used, the cement factor may be reduced a maximum 36 kg/cu m (0.60 hundredweight/cu yd). Cement factor reductions shall not be cumulative when using multiple admixtures. An accelerator shall always be added prior to a high range water-reducing admixture, if both are used.

If Class C fly ash or ground granulated blast-furnace slag is used in Class PP-1 concrete, a water-reducing or high range water-reducing admixture shall be used. However, the cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used. In addition, an accelerator shall not be used.

For Class PP-2 or PP-3 concrete, a non-chloride accelerator followed by a high range water-reducing admixture shall be used, in addition to the air-entraining admixture. For Class PP-3 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-2 or PP-3 concrete, the Contractor has the option to use a water-reducing admixture. A retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

When the air temperature is less than 13 °C (55 °F) for Class PP-1 or PP-2 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-4 concrete, a high range water-reducing admixture shall be used in addition to the air-entraining admixture. The Contractor has the option to use a water-reducing admixture. An accelerator shall not be used. For stationary or truck mixed concrete, a retarding admixture shall be used to allow for haul time. The Contractor has the option to use a mobile portland cement concrete plant according to Article 1103.04, but a retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

If the Department specifies a calcium chloride accelerator for Class PP-1 concrete, the maximum chloride dosage shall be 1.0 L (1.0 quart) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.0 L (2.0 quarts) per 45 kg (100 lb) of cement if approved by the Engineer. If the Department specifies a calcium chloride accelerator for Class PP-2 concrete, the maximum chloride dosage shall be 1.3 L (1.3 quarts) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.6 L (2.6 quarts) per 45 kg (100 lb) of cement if approved by the Engineer.

For Class PV, MS, SI, RR, SC and SH concrete, at the option of the Contractor, or when specified by the Engineer, a water-reducing admixture or a retarding admixture may be used. The amount of water-reducing admixture or retarding admixture permitted will be determined by the Engineer. The air-entraining admixture and other admixtures shall be added to the concrete separately, and shall be permitted to intermingle only after they have separately entered the concrete batch. The sequence, method and equipment for adding the admixtures shall be approved by the Engineer. The water-reducing admixture shall not delay the initial set of the concrete by more than one hour. Type I cement shall be used.

When a water-reducing admixture is added, a cement factor reduction of up to 18 kg/cu m (0.30 hundredweight/cu yd), from the concrete designed for a specific slump without the admixture, will be permitted for Class PV, MS, SI, RR, SC and SH concrete. When an approved high range water-reducing admixture is used, a cement factor reduction of up to 36 kg/cu m (0.60 hundredweight/cu yd), from a specific water cement/ratio without the admixture, will be permitted based on a 14 percent minimum water reduction. This is applicable to Class PV, MS, SI, RR, SC and SH concrete. A cement factor below 320 kg/cu m (5.35 hundredweight/cu yd) will not be permitted for Class PV, MS, SI, RR, SC and SH concrete. A cement factor reduction will not be

allowed for concrete placed underwater. Cement factor reductions shall not be cumulative when using multiple admixtures.

For use of admixtures to control concrete temperature, refer to Articles 1020.14(a) and 1020.14(b).

The maximum slumps given in Table 1 may be increased to 175 mm (7 in.) when a high range water-reducing admixture is used for all classes of concrete except Class PV and PP."

Revise Section 1021 of the Standard Specifications to read:

"SECTION 1021. CONCRETE ADMIXTURES

1021.01 General. Admixtures shall be furnished in liquid form ready for use. The admixtures may 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 to the satisfaction of the Engineer as to manufacturer and trade name of the material they contain.

Prior to inclusion of a product on the Department's Approved List of Concrete Admixtures, the manufacturer shall submit a report prepared by an independent laboratory accredited by the AASHTO Accreditation Program. 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.

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 335 kg/cu m (5.65 cwt/cu yd). Compressive strength test results for six months and one year will not be required.

In addition to the report, 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 335 kg/cu m (5.65 cwt/cu yd). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by the AASHTO Accreditation Program.

Prior to the approval of an admixture, the Engineer may conduct all or part of the applicable tests on a sample that is representative of the material to be furnished. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 335 kg/cu m (5.65 cwt/cu yd). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161, Procedure B.

The manufacturer shall include in the submittal the following information according to ASTM C 494; the average and manufacturing range of specific gravity, the average and manufacturing range of solids in the solution, and the average and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

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

All admixtures, except chloride-based accelerators, shall contain no more than 0.3 percent chloride by mass (weight).

1021.02 Air-Entraining Admixtures. Air-entraining admixtures shall conform to the requirements of AASHTO M 154.

If the manufacturer certifies that the air-entraining admixture is an aqueous solution of Vinsol resin that has been neutralized with sodium hydroxide (caustic soda), testing for compliance with the requirements may be waived by the Engineer. In the certification, the manufacturer shall show complete information with respect to the formulation of the solution, including the number of parts of Vinsol resin to each part of sodium hydroxide. Before the approval of its use is granted, the Engineer will test the solution for its air-entraining quality in comparison with a solution prepared and kept for that purpose.

1021.03 Retarding and Water-Reducing Admixtures. The admixture shall comply with the following requirements:

- (a) The retarding admixture shall comply with the requirements of AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) The water-reducing admixture shall comply with the requirements of AASHTO M 194, Type A.
- (c) The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).

When a Type F or Type G high range water-reducing admixture is used, water-cement ratios shall be a minimum of 0.32.

Type F or Type G admixtures may be used, subject to the following restrictions:

For Class MS, SI, RR, SC and SH concrete, the water-cement ratio shall be a maximum of 0.44.

The Type F or Type G admixture shall be added at the jobsite unless otherwise directed by the Engineer. The initial slump shall be a minimum of 40 mm (1 1/2 in.)

prior to addition of the Type F or Type G admixture, except as approved by the Engineer.

When a Type F or Type G admixture is used, retempering with water or with a Type G admixture will not be allowed. An additional dosage of a Type F admixture, not to exceed 40 percent of the original dosage, may be used to retemper concrete once, provided set time is not unduly affected. A second retempering with a Type F admixture may be used for all classes of concrete except Class PP and SC, provided that the dosage does not exceed the dosage used for the first retempering, and provided that the set time is not unduly affected. No further retempering will be allowed.

Air tests shall be performed after the addition of the Type F or Type G admixture.

1021.04 Set Accelerating Admixtures. The admixture shall comply with the requirements of AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating)”

80094

CURING AND PROTECTION OF CONCRETE CONSTRUCTION (BDE)

Effective: January 1, 2004

Revised: November 1, 2005

Revise the second and third sentences of the eleventh paragraph of Article 503.06 of the Standard Specifications to read:

“Forms on substructure units shall remain in place at least 24 hours. The method of form removal shall not result in damage to the concrete.”

Delete the twentieth paragraph of Article 503.22 of the Standard Specifications.

Revise the “Unit Price Adjustments” table of Article 503.22 of the Standard Specifications to read:

“UNIT PRICE ADJUSTMENTS	
Type of Construction	Percent Adjustment in Unit Price
For concrete in substructures, culverts (having a waterway opening of more than 1 sq m (10 sq ft)), pump houses, and retaining walls (except concrete pilings, footings and foundation seals):	
When protected by:	
Protection Method II	115%
Protection Method I	110%
For concrete in superstructures:	
When protected by:	
Protection Method II	123%
Protection Method I	115%
For concrete in footings:	
When protected by:	
Protection Method I, II or III	107%
For concrete in slope walls:	
When protected by:	
Protection Method I	107%

Delete the fourth paragraph of Article 504.05(a) of the Standard Specifications.

Revise the second and third sentences of the fifth paragraph of Article 504.05(a) of the Standard Specifications to read:

“All test specimens shall be cured with the units according to Article 1020.13.”

Revise the first paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

“Curing and Low Air Temperature Protection. The curing and protection for precast, prestressed concrete members shall be according to Article 1020.13 and this Article.”

Revise the first sentence of the second paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

“For curing, air vents shall be in place and shall be so arranged that no water can enter the void tubes during the curing of the members.”

Revise the first sentence of the third paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

“As soon as each member is finished, the concrete shall be covered with curing material according to Article 1020.13.”

Revise the eighth paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

“The prestressing force shall not be transferred to any member before the concrete has attained the compressive strength of 28,000 kPa (4000 psi) or other higher compressive release strength specified on the plans, as determined from tests of 150 mm (6 in.) by 300 mm (12 in.) cylinders cured with the member according to Article 1020.13. Members shall not be shipped until 28-day strengths have been attained and members have a yard age of at least 4 days.”

Delete the third paragraph of Article 512.03(a) of the Standard Specifications.

Delete the last sentence of the second paragraph of Article 512.04(d) of the Standard Specifications.

Revise the "Index Table of Curing and Protection of Concrete Construction" table of Article 1020.13 of the Standard Specifications to read:

"INDEX TABLE OF CURING AND PROTECTION OF CONCRETE CONSTRUCTION"			
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS
Cast-in-Place Concrete: ^{11/}			
Pavement			
Shoulder	1020.13(a)(1)(2)(3)(4)(5) ^{3/ 5/}	3	1020.13(c)
Base Course			
Base Course Widening	1020.13(a)(1)(2)(3)(4)(5) ^{1/ 2/}	3	1020.13(c)
Driveway			
Median			
Curb			
Gutter	1020.13(a)(1)(2)(3)(4)(5) ^{4/ 5/}	3	1020.13(c) ^{16/}
Curb and Gutter			
Sidewalk			
Slope Wall			
Paved Ditch			
Catch Basin			
Manhole	1020.13(a)(1)(2)(3)(4)(5) ^{4/}	3	1020.13(c)
Inlet			
Valve Vault			
Pavement Patching	1020.13(a)(1)(2)(3)(4)(5) ^{2/}	3 ^{12/}	1020.13(c)
Pavement Replacement	1020.13(a)(1)(2)(3)(4)(5) ^{1/ 2/}	3	442.06(h) and 1020.13(c)
Railroad Crossing	1020.13(a)(3)(5)	1	1020.13(c)
Piles	1020.13(a)(3)(5)	7	1020.13(e)(1)(2)(3)
Footings			
Foundation Seals	1020.13(a)(1)(2)(3)(4)(5) ^{4/ 6/}	7	1020.13(e)(1)(2)(3)
Substructure	1020.13(a)(1)(2)(3)(4)(5) ^{1/ 7/}	7	1020.13(e)(1)(2)(3)
Superstructure (except deck)	1020.13(a)(1)(2)(3)(5) ^{8/}	7	1020.13(e)(1)(2)
Deck	1020.13(a)(5)	7	1020.13(e)(1)(2) ^{17/}
Retaining Walls	1020.13(a)(1)(2)(3)(4)(5) ^{1/ 7/}	7	1020.13(e)(1)(2)
Pump Houses	1020.13(a)(1)(2)(3)(4)(5) ^{1/}	7	1020.13(e)(1)(2)
Culverts	1020.13(a)(1)(2)(3)(4)(5) ^{4/ 6/}	7	1020.13(e)(1)(2) ^{18/}
Other Incidental Concrete	1020.13(a)(1)(2)(3)(5)	3	1020.13(c)
Precast Concrete: ^{11/}			
Bridge Beams			
Piles			
Bridge Slabs	1020.13(a)(3)(5) ^{9/ 10/}	As required. ^{13/}	504.06(c)(6), 1020.13(e)(2) ^{19/}
Nelson Type Structural Member			
All Other Precast Items	1020.13(a)(3)(4)(5) ^{2/ 9/ 10/}	As required. ^{14/}	504.06(c)(6), 1020.13(e)(2) ^{19/}
Precast, Prestressed Concrete: ^{11/}			
All Items	1020.13(a)(3)(5) ^{9/ 10/}	Until strand tensioning is released. ^{15/}	504.06(c)(6), 1020.13(e)(2) ^{19/}

Notes-General:

- 1/ Type I, membrane curing only
- 2/ Type II, membrane curing only
- 3/ Type III, membrane curing only
- 4/ Type I, II and III membrane curing
- 5/ Membrane curing will not be permitted between November 1 and April 15.
- 6/ The use of water to inundate footings, foundation seals or the bottom slab of culverts is permissible when approved by the Engineer, provided the water temperature can be maintained at 7 °C (45 °F) or higher.
- 7/ Asphalt Emulsion for Waterproofing may be used in lieu of other curing methods when specified and permitted according to Article 503.18.
- 8/ On non-traffic surfaces which receive protective coat according to Article 503.19, a linseed oil emulsion curing compound may be used as a substitute for protective coat and other curing methods. The linseed emulsion curing compound will be permitted between April 16 and October 31 of the same year, provided it is applied with a mechanical sprayer according to Article 1101.09 (b), and meets the material requirements of Article 1022.07.
- 9/ Steam curing (heat and moisture) is acceptable and shall be accomplished by the method specified in Article 504.06(c)(6).
- 10/ A moist room according to AASHTO M 201 is acceptable for curing.
- 11/ If curing is required and interrupted because of form removal for cast-in-place concrete items, precast concrete products, or precast prestressed concrete products, the curing shall be resumed within two hours from the start of the form removal.
- 12/ Curing maintained only until opening strength is attained, with a maximum curing period of three days.
- 13/ The curing period shall end when the concrete has attained the mix design strength. The producer has the option to discontinue curing when the concrete has attained 80 percent of the mix design strength or after seven days. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 14/ The producer shall determine the curing period or may elect to not cure the product. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 15/ The producer has the option to continue curing after strand release.
- 16/ When structural steel or structural concrete is in place above slope wall, Article 1020.13(c) shall not apply. The protection method shall be according to Article 1020.13(e)(1).
- 17/ When Article 1020.13(e)(2) is used to protect the deck, the housing may enclose only the bottom and sides. The top surface shall be protected according to Article 1020.13(e)(1).
- 18/ For culverts having a waterway opening of 1 sq m (10 sq ft) or less, the culverts may be protected according to Article 1020.13(e)(3).
- 19/ The seven day protection period in the first paragraph of Article 1020.13(e)(2) shall not apply. The protection period shall end when curing is finished. For the third paragraph of Article 1020.13(e)(2), the decrease in temperature shall be according to Article 504.06(c)(6)."

Add the following to Article 1020.13(a) of the Standard Specifications:

"(5) Wetted Cotton Mat Method. After the surface of concrete has been textured or finished, it shall be covered immediately with dry cotton mats. The cotton mats shall be placed in a manner which will not mar the concrete surface. A texture resulting from the cotton mat material is acceptable. The cotton mats shall then be wetted immediately and thoroughly soaked with a gentle spray of water. For bridge decks, a foot bridge shall be used to place and wet the cotton mats.

The cotton mats shall be maintained in a wetted condition until the concrete has hardened sufficiently to place soaker hoses without marring the concrete surface. The soaker hoses shall be placed on top of the cotton mats at a maximum 1.2 m (4 ft) spacing. The cotton mats shall be kept wet with a continuous supply of water for the remainder of the curing period. Other continuous wetting systems may be used if approved by the Engineer.

After placement of the soaker hoses, the cotton mats shall be covered with white polyethylene sheeting or burlap-polyethylene blankets.

For construction items other than bridge decks, soaker hoses or a continuous wetting system will not be required if the alternative method keeps the cotton mats wet. Periodic wetting of the cotton mats is acceptable.

For areas inaccessible to the cotton mats on bridge decks, curing shall be according to Article 1020.13(a)(3)."

Revise the first paragraph of Article 1020.13(c) of the Standard Specifications to read:

"Protection of Portland Cement Concrete, Other Than Structures, From Low Air Temperatures. When the official National Weather Service forecast for the construction area predicts a low of 0 °C (32 °F), or lower, or if the actual temperature drops to 0 °C (32 °F), or lower, concrete less than 72 hours old shall be provided at least the following protection:"

Delete Article 1020.13(d) and Articles 1020.13(d)(1),(2),(3),(4) of the Standard Specifications.

Revise the first five paragraphs of Article 1020.13(e) of the Standard Specifications to read:

"Protection of Portland Cement Concrete Structures From Low Air Temperatures. When the official National Weather Service Forecast for the construction area predicts a low below 7 °C (45 °F), or if the actual temperature drops below 7 °C (45 °F), concrete less than 72 hours old shall be provided protection. Concrete shall also be provided protection when placed during the winter period of December 1 through March 15. Concrete shall not be placed until the materials, facilities, and equipment for protection are approved by the Engineer.

When directed by the Engineer, the Contractor may be required to place concrete during the winter period. If winter construction is specified, the Contractor shall proceed with the construction, including concrete, excavation, pile driving, steel erection, and all appurtenant work required for the complete construction of the item, except at times when weather conditions make such operations impracticable.

Regardless of the precautions taken, the Contractor shall be responsible for protection of the concrete placed and any concrete damaged by cold temperatures shall be removed and replaced at no additional cost to the Department."

Add the following at the end of the third paragraph of Article 1020.13(e)(1) of the Standard Specifications:

"The Contractor shall provide means for checking the temperature of the surface of the concrete during the protection period."

Revise the second sentence of the first paragraph of Article 1020.13(e)(2) of the Standard Specifications to read:

"The Contractor shall provide means for checking the temperature of the surface of the concrete or air temperature within the housing during the protection period."

Delete the last sentence of the first paragraph of Article 1020.13(e)(3) of the Standard Specifications.

Add the following Article to Section 1022 of the Standard Specifications:

"1022.06 Cotton Mats. Cotton mats shall consist of a cotton fill material, minimum 400 g/sq m (11.8 oz/sq yd), covered with unsized cloth or burlap, minimum 200 g/sq m (5.9 oz/sq yd), and be tufted or stitched to maintain stability.

Cotton mats shall be in a condition satisfactory to the Engineer. Any tears or holes in the mats shall be repaired."

Add the following Article to Section 1022 of the Standard Specifications:

"1022.07 Linseed Oil Emulsion Curing Compound. Linseed oil emulsion curing compound shall be composed of a blend of boiled linseed oil and high viscosity, heavy bodied linseed oil emulsified in a water solution. The curing compound shall meet the requirements of a Type I according to Article 1022.01, except the drying time requirement will be waived. The oil phase shall be 50 ± 4 percent by volume. The oil phase shall consist of 80 percent by mass (weight) boiled linseed oil and 20 percent by mass (weight) Z-8 viscosity linseed oil. The water phase shall be 50 ± 4 percent by volume."

Revise Article 1020.14 of the Standard Specifications to read:

1020.14 Temperature Control for Placement. Temperature control for concrete placement shall be according to the following.

- (a) Temperature Control other than Structures. The temperature of the concrete immediately before placement shall be a minimum of 10 °C (50 °F) and a maximum of 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced. The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

Plastic concrete temperatures up to 35 °C (96 °F), as placed, may be permitted provided job site conditions permit placement and finishing without excessive use of water on and/or overworking of the surface. The occurrence within 24 hours of unusual surface distress shall be cause to revert to a maximum 32 °C (90 °F) plastic concrete temperature.

Concrete shall not be placed when the air temperature is below 5 °C (40 °F) and falling or below 2 °C (35 °F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the aggregates to be heated to between 20 °C (70 °F) and 65 °C (150 °F). The aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

For pavement patching, refer to Article 442.06(e) for additional information on temperature control for placement.

- (b) Temperature Control for Structures. The temperature of the concrete, as placed in the forms, shall be a minimum of 10 °C (50 °F) and a maximum of 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits. When insulated forms are used, the temperature of the concrete mixture shall not exceed 25 °C (80 °F). If the Engineer determines that heat of hydration might cause excessive temperatures in the concrete, the concrete shall be placed at a temperature between 10 °C (50 °F) and 15 °C (60 °F). When concrete is placed in contact with previously placed concrete, the temperature of the concrete may be increased as required to offset anticipated heat loss.

Concrete shall not be placed when the air temperature is below 7 °C (45 °F) and falling or below 4 °C (40 °F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the aggregates to be heated to between 20 °C (70 °F) and 65 °C (150 °F). The aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced. The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

- (c) Temperature. The concrete temperature shall be determined according to ASTM C 1064."

80114

DETECTABLE WARNINGS (BDE)

Effective: August 1, 2005

Replace Articles 424.08 – 424.12 of the Standard Specifications with the following:

424.08 Curb Ramps. Curb ramps shall be constructed according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG), the Illinois Accessibility Code, and as shown on the plans.

Curb ramps shall be constructed to the same thickness as the adjacent sidewalk with a minimum thickness of 100 mm (4 in.).

424.09 Detectable Warnings. Detectable warnings shall consist of a surface of truncated domes meeting the requirements of the ADAAG and the details shown on the plans.

Detectable warnings shall be installed at curb ramps, medians and pedestrian refuge islands, at-grade railroad crossings, transit platform edges, and other locations where pedestrians are required to cross a hazardous vehicular way. Detectable warnings shall also be installed at alleys and commercial entrances when permanent traffic control devices are present. The installation shall be an integral part of the walking surface and only the actual domes shall project above the walking surface.

The product or method used for installing detectable warnings shall come with the following documents which shall be given to the Engineer prior to use.

- (a) Manufacturer's certification stating the product is fully compliant with the ADAAG.
- (b) Manufacturer's five year warranty.
- (c) Manufacturer's specifications stating the required materials, equipment, and installation procedures.

Products that are colored shall be colored their entire thickness.

The materials, equipment, and installation procedures used shall be according to the manufacturer's specifications.

424.10 Backfill. After the concrete has been cured, the spaces along the edges of the sidewalk and ramps shall be backfilled with approved material. The material shall be compacted until firm and the surface neatly graded.

424.11 Disposal of Surplus Material. Surplus or waste material shall be disposed of according to Article 202.03.

424.12 Method of Measurement. This work will be measured for payment in place and the area computed in square meters (square feet). Curb ramps will be measured for payment as sidewalk. No deduction will be made for detectable warnings located within the ramp.

Detectable warnings will be measured for payment in place and the area computed in square meters (square feet).

Earth excavation will be measured for payment according to Article 202.07.

424.13 Basis of Payment. This work will be paid for at the contract unit price per square meter (square foot) for PORTLAND CEMENT CONCRETE SIDEWALK, of the thickness specified.

Detectable warnings will be paid for at the contract unit price per square meter (square foot) for DETECTABLE WARNINGS.

Earth excavation will be paid for according to Article 202.08."

80146

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

Effective: September 1, 2000

Revised: June 22, 2005

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 DBE Directory or most recent addendum.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100% 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% 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 firms performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is based on an assessment of the type of work, the location of the work, and the availability of 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 0,0 % of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

- (a) The bidder documents that firmly committed DBE participation has been obtained to meet the goal; or
- (b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

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

BIDDING PROCEDURES. Compliance with the bidding procedures of this Special Provision is required prior to the award of the contract and the failure of the as-read low bidder to comply will render the bid not responsive.

- (a) In order to assure the timely award of the contract, the as-read low bidder shall submit a Disadvantaged Business Utilization Plan on Department form SBE 2026 within seven (7) working days after the date of letting. To meet the seven (7) day requirement, the bidder may send the Plan by certified mail or delivery service within the seven (7) working day period. If a question arises concerning the mailing date of a Plan, the mailing date will be established by the U.S. Postal Service postmark on the original certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure that the postmark or receipt date is affixed within the seven (7) working days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Plan is to be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). It is the responsibility of the bidder to obtain confirmation of telefax delivery. The Department will not accept a Utilization Plan if it does not meet the seven (7) day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other

bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. The signatures on these forms must be original signatures. All elements of information indicated on the said form shall be provided, including but not limited to the following:
 - (1) The name and address of each DBE to be used;
 - (2) A description, including pay item numbers, of the commercially useful work to be done by each DBE;
 - (3) The price to be paid to each DBE for the identified work specifically stating the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
 - (4) A commitment statement signed by the bidder and each DBE evidencing availability and intent to perform commercially useful work on the project; and
 - (5) If the bidder is a joint venture comprised of DBE firms and non-DBE firms, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (d) The contract will not be awarded until the Utilization Plan submitted by the bidder is approved. The Utilization Plan will be approved by the Department if the Plan commits sufficient commercially useful DBE work performance to meet the contract goal. The Utilization Plan will not be approved by the Department if the Plan does not commit sufficient DBE performance to meet the contract goal unless the bidder documents that it made a good faith effort to meet the goal. The good faith procedures of Section VIII of this special provision apply. If the Utilization Plan is not approved because it is deficient in a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no less than a five (5) working day period in order to cure the deficiency.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments

made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100% goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE firm does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100% 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% goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE firm does not count toward the DBE goal.
- (d) DBE as a trucker: 100% goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the full value of all such DBE trucks operated using DBE employed drivers. Goal credit will be limited to the value of the reasonable fee or commission received by the DBE if trucks are leased from a non-DBE company.
- (e) DBE as a material supplier:
 - (1) 60% goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100% goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
 - (3) 100% credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

GOOD FAITH EFFORT PROCEDURES. If the bidder cannot obtain sufficient DBE commitments to meet the contract goal, the bidder must document in the Utilization Plan the good faith efforts made in the attempt to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary

and reasonable steps are those which could reasonably be expected to obtain sufficient DBE participation. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts are not good faith efforts; rather, the bidder is expected to have taken those efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
 - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
 - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
 - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
 - (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a bidder to perform the work of a contract with its own

organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.

- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
 - (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
 - (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
 - (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that a good faith effort has not been made, the Department will notify the bidder of that preliminary determination by contacting the responsible company official designated in the Utilization Plan. The preliminary determination shall include a statement of reasons why good faith efforts have not been found, and may include additional good faith efforts that the bidder could take. The notification will designate a five (5) working day period during which the bidder shall take additional efforts. The bidder is not limited by a statement of additional efforts, but may take other action beyond any stated additional efforts in order to obtain additional DBE commitments. The bidder shall submit an amended Utilization Plan if additional DBE commitments to meet the contract goal are secured. If additional DBE commitments sufficient to meet the contract goal are not secured, the bidder shall report the final good faith efforts made in the time allotted. All additional efforts taken by the bidder will be considered as part of the bidder's good faith efforts. If the bidder is not able to meet the goal after taking additional efforts, the Department will make a pre-final determination of the good faith efforts of the bidder and will notify the designated responsible company official of the reasons for an adverse determination.
- (c) The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five (5) working days after the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen

Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The pre-final determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. In addition, the request shall be considered a consent by the bidder to extend the time for award. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten (10) working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. If a DBE listed in the Utilization Plan is terminated for reasons other than convenience, or fails to complete its work on the contract for any reason, the Contractor shall make good faith efforts to find another DBE to substitute for the terminated DBE. The good faith efforts shall be

directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, but only to the extent needed to meet the contract goal or the amended contract goal. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.

- (c) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefor to the DBE by the Contractor, but not later than thirty (30) calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Report on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the Report shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (d) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (e) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

EPOXY COATING ON REINFORCEMENT (BDE)

Effective: April 1, 1997

Revised: January 1, 2003

For work outside the limits of bridge approach pavement, all references to epoxy coating in the Highway Standards and Standard Specifications for reinforcement, tie bars and chair supports will not apply for pavement, shoulders, curb, gutter, combination curb and gutter and median.

31578

FLAGGER VESTS (BDE)

Effective: April 1, 2003

Revised: August 1, 2005

Revise the first sentence of Article 701.04(c)(1) of the Standard Specifications to read:

"The flagger shall be stationed to the satisfaction of the Engineer and be equipped with a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 2 garments and approved flagger traffic control signs conforming to Standard 702001 and Article 702.05(e)."

Revise Article 701.04(c)(6) of the Standard Specifications to read:

"(6) Nighttime Flagging. Flaggers shall be illuminated by an overhead light source providing a minimum vertical illuminance of 108 lux (10 fc) measured 300 mm (1 ft) out from the flagger's chest. The bottom of any luminaire shall be a minimum of 3 m (10 ft) above the pavement. Luminaire(s) shall be shielded to minimize glare to approaching traffic and trespass light to adjoining properties.

The flagger vest shall be a fluorescent orange or fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 3 garments."

80101

FREEZE-THAW RATING (BDE)

Effective: November 1, 2002

Revise the first sentence of Article 1004.02(f) of the Standard Specifications to read:

“When coarse aggregate is used to produce portland cement concrete for base course, base course widening, pavement, driveway pavement, sidewalk, shoulders, curb, gutter, combination curb and gutter, median, paved ditch or their repair using concrete, the gradation permitted will be determined from the results of the Department’s Freeze-Thaw Test.”

80079

FURNISHED EXCAVATION (BDE)

Effective: August 1, 2002

Revised: November 1, 2004

Revise Article 204.01 of the Standard Specifications to read:

Description. Borrow excavation and furnished excavation shall consist of excavating suitable materials obtained from locations approved by the Engineer and transporting the materials to various locations throughout the limits of the contract."

Revise Article 204.07(b) of the Standard Specifications to read:

"(b) Measured Quantities. Furnished excavation will be computed for payment in cubic meters (cubic yards) as follows:

Furnished Excavation = Embankment - [Suitable Excavation x (1 - Shrinkage Factor)]

Where:

Embankment = the volume of fill in its final position computed by the method of average end areas and based upon the existing ground line as shown on the plans except as noted in (1) and (2) below;

Suitable Excavation = earth excavation, rock excavation, and other on-site excavation suitable for use in embankments as shown in the Earthwork Schedule on the plans;

Shrinkage Factor = 0.25 unless otherwise shown on the plans.

(1) If the Contractor so requests, the Engineer will reestablish the existing ground line after the clearing and tree removal have been performed according to Section 201 and the top 150 mm (6 in.) of the existing ground surface has been disked and compacted to the satisfaction of the Engineer.

(2) If settlement platforms are erected, the Engineer will reestablish the existing ground line after the embankment is complete as specified in Article 204.07(a)(2).

Furnished excavation placed in excess of that required for the execution of the contract will not be measured for payment."

Add the following paragraph to the end of Article 204.07 of the Standard Specifications:

"The quantity for furnished excavation will not be recalculated when surplus, suitable materials are utilized in embankments according to Article 202.03."

80072

PARTIAL PAYMENTS (BDE)

Effective: September 1, 2003

Revise Article 109.07 of the Standard Specifications to read:

"109.07 Partial Payments. Partial payments will be made as follows:

- (a) Progress Payments. At least once each month, the Engineer will make a written estimate of the amount of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved. Furthermore, progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c).

- (b) Material Allowances. At the discretion of the Department, payment may be made for materials, prior to their use in the work, when satisfactory evidence is presented by the Contractor. Satisfactory evidence includes justification for the allowance (to expedite the work, meet project schedules, regional or national material shortages, etc.), documentation of material and transportation costs, and evidence that such material is properly stored on the project or at a secure location acceptable and accessible to the Department.

Material allowances will be considered only for nonperishable materials when the cost, including transportation, exceeds \$10,000 and such materials are not expected to be utilized within 60 days of the request for the allowance. For contracts valued under \$500,000, the minimum \$10,000 requirement may be met by combining the principal (material) product of no more than two contract items. An exception to this two item limitation may be considered for any contract regardless of value for items in which material (products) are similar except for type and/or size.

Material allowances shall not exceed the value of the contract items in which used and shall not include the cost of installation or related markups. Amounts paid by the Department for material allowances will be deducted from estimates due the Contractor as the material is used. Two-sided copies of the Contractor's cancelled checks for materials and transportation must be furnished to the Department within 60 days of payment of the allowances or the amounts will be reclaimed by the Department."

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000

Revised: September 1, 2003

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts no later than 30 days from the receipt of each payment made to the Contractor.

State law addresses the timing of payments to be made to subcontractors. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, generally requires that when a Contractor receives any payment from the Department, the Contractor is required to make corresponding, proportional payments to each subcontractor performing work within 15 calendar days after receipt of the state payment. Section 7 of the State Prompt Payment Act further provides that interest in the amount of 2% per month, in addition to the payment due, shall be paid to any subcontractor 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 throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

As progress payments are made to the Contractor in accordance with Article 109.07 of the Standard Specifications for Road and Bridge Construction, the Contractor shall make a corresponding partial payment within 15 calendar days to each subcontractor in proportion to the work satisfactorily completed by each subcontractor. The proportionate amount of partial payment due to each subcontractor 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 shall be paid in full within 15 calendar days after the subcontractor's work has been satisfactorily completed. The Contractor shall hold no retainage from the subcontractors.

This Special Provision does not create any rights in favor of any subcontractor against the State of Illinois or authorize any cause of action against the State of Illinois on account of any payment, nonpayment, delayed payment or interest claimed by application of the State Prompt Payment Act. The Department will neither determine the reasonableness of any cause for delay of payment nor enforce any claim to payment, including interest. Moreover, the Department will not approve any delay or postponement of the 15 day requirement. State law creates 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 in accordance with the Public Construction Bond Act, 30 ILCS 550.

80022

PAYROLLS AND PAYROLL RECORDS (BDE)

Effective: August 10, 2005

FEDERAL AID CONTRACTS. Add the following State of Illinois requirements to the Federal requirements contained in Section V of Form FHWA-1273:

"The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form."

STATE CONTRACTS. Revise Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

"IV. COMPLIANCE WITH THE PREVAILING WAGE ACT

1. **Prevailing Wages.** All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the Contractor will not be allowed additional compensation on account of said revisions.
2. **Payroll Records.** The Contractor and each subcontractor shall make and keep, for a period of three years from the date of completion of this contract, records of the wages paid to his/her workers. The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid. Upon two business days' notice, these records shall be available, at all reasonable hours at a location within the State, for inspection by the Department or the Department of Labor.
3. **Submission of Payroll Records.** The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form.

Each submittal shall be accompanied by a statement signed by the Contractor or subcontractor which avers that: (i) such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required by the Act; and (iii) the Contractor or subcontractor is aware that filing a payroll record that he/she knows to be false is a Class B misdemeanor.

4. Employee Interviews. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor."

80155

PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: July 1, 2004

All personnel, excluding flaggers, working outside of a vehicle (car or truck) within 7.6 m (25 ft) of pavement open to traffic shall wear a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 2 garments. Other types of garments may be substituted for the vest as long as the garments have manufacturers tags identifying them as meeting the ANSI Class 2 requirement.

80130

PORTLAND CEMENT (BDE)

Effective: January 1, 2005

Revised: November 1, 2005

Add the following paragraph after the last paragraph of Article 1001.01 of the Standard Specifications.

“For portland cement according to ASTM C 150, the bill of lading shall state if limestone has been added. The bill of lading shall also state that the limestone addition is not in excess of five percent by mass (weight) of the cement.”

80139

PORTLAND CEMENT CONCRETE (BDE)

Effective: November 1, 2002

Add the following paragraph after the fourth paragraph of Article 1103.01(b) of the Standard Specifications:

“The truck mixer shall be approved before use according to the Bureau of Materials and Physical Research’s Policy Memorandum, “Approval of Concrete Plants and Delivery Trucks”.”

Add the following paragraph after the first paragraph of Article 1103.01(c) of the Standard Specifications:

“The truck agitator shall be approved before use according to the Bureau of Materials and Physical Research’s Policy Memorandum, “Approval of Concrete Plants and Delivery Trucks”.”

Add the following paragraph after the first paragraph of Article 1103.01(d) of the Standard Specifications:

“The nonagitator truck shall be approved before use according to the Bureau of Materials and Physical Research’s Policy Memorandum, “Approval of Concrete Plants and Delivery Trucks”.”

Revise the first sentence of the first paragraph of Article 1103.02 of the Standard Specifications to read:

“The plant shall be approved before production begins according to the Bureau of Materials and Physical Research’s Policy Memorandum, “Approval of Concrete Plants and Delivery Trucks”.”

80083

PREFORMED RECYCLED RUBBER JOINT FILLER (BDE)

Effective: November 1, 2002

Revise Article 503.02(c) of the Standard Specifications to read:

“(c) Prefomed Expansion Joint Filler.....1051”

Revise Article 637.02(d) of the Standard Specifications to read:

“(d) Prefomed Expansion Joint Filler.....1051”

Add the following Article to Section 1051 of the Standard Specifications:

“1051.10 Prefomed Recycled Rubber Joint Filler. Prefomed recycled rubber joint filler shall consist of ground tire rubber, free of steel and fabric, combined with ground scrap or waste polyethylene. It shall not have a strong hydrocarbon or rancid odor and shall meet the physical property requirements of ASTM D 1752. Water absorption by volume shall not exceed 5.0 percent.”

80084

RAP FOR USE IN BITUMINOUS CONCRETE MIXTURES (BDE)

Effective: January 1, 2000

Revised: April 1, 2002

Revise Article 1004.07 to read:

"1004.07 RAP Materials. RAP is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt pavement. RAP must originate from routes or airfields under federal, state or local agency jurisdiction. The Contractor shall supply documentation that the RAP meets these requirements.

- (a) Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP will be allowed on top of the pile after the pile has been sealed.
- (1) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I/ Superpave, or equivalent mixtures only and represent the same aggregate quality, but shall be at least C quality or better, the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag), similar gradation and similar AC 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. Homogenous stockpiles shall meet the requirements of Article 1004.07(d). Homogeneous RAP stockpiles not meeting these requirements may be processed (crushing and screening) and retested.
 - (2) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I/ Superpave, or equivalent mixtures only. The coarse aggregate in this RAP shall be crushed aggregate only and may represent more than one aggregate type and/or quality but shall be at least C quality or better. This RAP may have an inconsistent gradation and/or asphalt cement content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 16 mm (5/8 in.) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department. Conglomerate RAP stockpiles shall meet the requirements of Article 1004.07(d).
 - (3) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP containing coarse aggregate (crushed or round) that is at least D quality or better. This RAP may have an inconsistent gradation and/or asphalt content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department. Conglomerate DQ RAP shall meet the requirements of Article 1004.07(d).

Reclaimed Superpave Low ESAL IL-9.5L surface mixtures shall only be placed in conglomerate DQ RAP stockpiles due to the potential for rounded aggregate.

- (4) Other. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Other". "Other" RAP stockpiles shall not be used in any of the Department's bituminous mixtures.
- (b) Use. The allowable use of a RAP stockpile shall be set by the lowest quality of coarse aggregate in the RAP stockpile. Class I/Superpave surface mixtures are designated as containing Class B quality coarse aggregate only. Superpave Low ESAL IL-19.0L binder and IL-9.5L surface mixtures are designated as Class C quality coarse aggregate only. Class I/Superpave binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate only. Bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate only. Any mixture not listed above shall have the designated quality determined by the Department.

RAP containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in Class I/Superpave (including Low ESAL) surface mixtures only. RAP stockpiles for use in Class I/Superpave mixtures (including Low ESAL), base course, base course widening and Class B mixtures shall be either homogeneous or conglomerate RAP stockpiles except conglomerate RAP stockpiles shall not be used in Superpave surface mixture Ndesign 50 or greater. RAP for use in bituminous aggregate mixtures (BAM) shoulders and BAM stabilized subbase shall be from homogeneous, conglomerate, or conglomerate DQ stockpiles.

Additionally, RAP used in Class I/Superpave surface mixtures shall originate from milled or crushed mixtures only, in which the coarse aggregate is of Class B quality or better. RAP stockpiles for use in Class I/Superpave (including Low ESAL) binder mixes as well as base course, base course widening and Class B mixtures shall originate from milled or processed surface mixture, binder mixture, or a combination of both mixtures uniformly blended to the satisfaction of the Engineer, in which the coarse aggregate is of Class C quality or better.

- (c) Contaminants. RAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.
- (d) Testing. All RAP shall be sampled and tested either during or after stockpiling.

For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 450 metric tons (500 tons) for the first 1800 metric tons (2,000 tons) and one sample per 1800 metric tons (2,000 tons) thereafter. A minimum of five tests shall be required for stockpiles less than 3600 metric tons (4,000 tons).

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

Before extraction, each field sample shall be split to 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.

All of the extraction results shall be compiled and averaged for asphalt content and gradation. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	Homogeneous / Conglomerate	Conglomerate "D" Quality
25 mm (1 in.)		± 5%
12.5 mm (1/2 in.)	± 8%	± 15%
4.75 mm (No. 4)	± 6%	± 13%
2.36 mm (No. 8)	± 5%	
1.18 mm (No. 16)		± 15%
600 μm (No. 30)	± 5%	
75 μm (No. 200)	± 2.0%	± 4.0%
AC	± 0.4%	± 0.5%

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt content test results fall outside the appropriate tolerances, the RAP will not be allowed to be used in the Department's bituminous concrete mixtures unless the RAP representing the failing tests is removed from the stockpile to the satisfaction of the Engineer. 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)".

- (e) Designs. At the Contractor's option, bituminous concrete mixtures may be constructed utilizing RAP material meeting the above detailed requirements. The amount of RAP included in the mixture shall not exceed the percentages specified in the plans.

RAP designs shall be submitted for volumetric verification. If additional RAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP stockpile

and design, and meets all of the requirements herein, the additional RAP stockpiles may be used in the original mix design at the percent previously verified.

- (f) Production. The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the bituminous mixture being produced.

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

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

80011

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

SUBGRADE PREPARATION (BDE)

Effective: November 1, 2002

Revise the tenth paragraph of Article 301.03 of the Standard Specifications to read:

“Equipment of such weight, or used in such a way as to cause a rut in the finished subgrade of 13 mm (1/2 in.) or more in depth, shall be removed from the work or the rutting otherwise prevented.”

80086

TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 1992

Revised: January 1, 2005

To ensure a prompt response to incidents involving the integrity of work zone traffic control, the Contractor shall provide a telephone number where a responsible individual can be contacted 24 hours-a-day.

When the Engineer is notified, or determines a traffic control deficiency exists, he/she will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 12 hours based upon the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge.

A deficiency may be any lack of repair, maintenance, or non-compliance with the traffic control plan. A deficiency may also be applied to situations where corrective action is not an option such as the use of non-certified flaggers for short term operations; working with lane closures beyond the time allowed in the contract; or failure to perform required contract obligations such as traffic control surveillance.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The daily monetary deduction will be either \$1,000 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option this monetary deduction will be immediate.

In addition, if the Contractor fails to respond, the Engineer may correct the deficiency and the cost thereof will be deducted from monies due or which may become due the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

57291

TRUCK BED RELEASE AGENT (BDE)

Effective: April 1, 2004

Add the following sentence after the third sentence of the first paragraph of Article 406.14 of the Standard Specifications.

"In addition to the release agent, the Contractor may use a light scatter of manufactured sand (FA 20 or FA 21) evenly distributed over the bed of the vehicle."

80123

WEIGHT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2001

Revised: August 1, 2002

The Contractor shall provide accurate weights of materials delivered to the contract for incorporation into the work (whether temporary or permanent) and for which the basis of payment is by weight. These weights shall be documented on delivery tickets which shall identify the source of the material, type of material, the date and time the material was loaded, the contract number, the net weight, the tare weight when applicable and the identification of the transporting vehicle. For aggregates, the Contractor shall have the driver of the vehicle furnish or establish an acceptable alternative to provide the contract number and a copy of the material order to the source for each load. The source is defined as that facility that produces the final material product that is to be incorporated into the contract pay items.

The Department will conduct random, independent vehicle weight checks for material sources according to the procedures outlined in the Documentation Section Policy Statement of the Department's Construction Manual and hereby incorporated by reference. The results of the independent weight checks shall be applicable to all contracts containing this Special Provision. Should the vehicle weight check for a source result in the net weight of material on the vehicle exceeding the net weight of material shown on the delivery ticket by 0.50% (0.70% for aggregates) or more, the Engineer will document the independent vehicle weight check and immediately furnish a copy of the results to the Contractor. No adjustment in pay quantity will be made. Should the vehicle weight check for a source result in the net weight of material shown on the delivery ticket exceeding the net weight of material on the vehicle by 0.50% (0.70% for aggregates) or more, the Engineer will document the independent vehicle weight check and immediately furnish a copy of the results to the Contractor. The Engineer will adjust the net weight shown on the delivery ticket to the checked delivered net weight as determined by the independent vehicle weight check.

The Engineer will also adjust the method of measurement for all contracts for subsequent deliveries of all materials from the source based on the independent weight check. The net weight of all materials delivered to all contracts containing this Special Provision from this source, for which the basis of payment is by weight, will be adjusted by applying a correction factor "A" as determined by the following formula:

$$A = 1.0 - \left(\frac{B - C}{B} \right); \text{ Where } A \leq 1.0; \left(\frac{B - C}{C} \right) > 0.50\% \text{ (0.70\% for aggregates)}$$

Where A = Adjustment factor

B = Net weight shown on delivery ticket

C = Net weight determined from independent weight check

The adjustment factor will be applied as follows:

$$\text{Adjusted Net Weight} = A \times \text{Delivery Ticket Net Weight}$$

The adjustment factor will be imposed until the cause of the deficient weight is identified and corrected by the Contractor to the satisfaction of the Engineer. If the cause of the deficient weight is not identified and corrected within seven (7) calendar days, the source shall cease delivery of all materials to all contracts containing this Special Provision for which the basis of payment is by weight.

Should the Contractor elect to challenge the results of the independent weight check, the Engineer will continue to document the weight of material for which the adjustment factor would be applied. However, provided the Contractor furnishes the Engineer with written documentation that the source scale has been calibrated within seven (7) calendar days after the date of the independent weight check, adjustments in the weight of material paid for will not be applied unless the scale calibration demonstrates that the source scale was not within the specified Department of Agriculture tolerance.

At the Contractor's option, the vehicle may be weighed on a second independent Department of Agriculture certified scale to verify the accuracy of the scale used for the independent weight check.

80048

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within *125* working days.

80071

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

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ATTACHMENTS

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

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

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 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. Selection of Labor: During the performance of this contract, the contractor shall not:

- a. Discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
- b. Employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

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 reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any

evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to

the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or 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 with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

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

III. NONSEGREGATED FACILITIES

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

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

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

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the

contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or

disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

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

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not

listed on the wage determination unless the Administrator of the

be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits

Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

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

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

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

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other 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 workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

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

9. Withholding for Unpaid Wages and Liquidated Damages:

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

V. STATEMENTS AND PAYROLLS

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

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

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

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan

or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period).

The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V.

This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all 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 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for

inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

- a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
- b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
- c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

- a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a

whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract.

Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S. C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification,

distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

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

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

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

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

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

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

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

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of

any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

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

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled

"Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

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

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 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 lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility And Voluntary Exclusion-Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

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

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

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.il.gov/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.il.gov/desenv/subsc.html>.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.