

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 Timothy.Garman@illinois.gov.

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

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

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

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

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

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

ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

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

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RETURN WITH BID

Proposal Submitted By
Name
Address
City

Letting June 13, 2008

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

NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.
(SEE INSTRUCTIONS ON THE INSIDE OF COVER)

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



Illinois Department
of Transportation

Springfield, Illinois 62764

Contract No. 68708
TAZEWELL County
Section D4 BRIDGE METALIZING 2008
District 4 Construction Funds
Route FAI 155

PLEASE MARK THE APPROPRIATE BOX BELOW:

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

Plans Included
Herein

Prepared by

S

Checked by

(Printed by authority of the State of Illinois)

INSTRUCTIONS

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

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

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

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

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

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

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Preparation and submittal of bids	217/782-7806
Mailing of CD-ROMS	217/782-7806

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PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of _____

Taxpayer Identification Number (Mandatory) _____ a

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

**Contract No. 68708
TAZEWELL County
Section D4 BRIDGE METALIZING 2008
Route FAI 155
District 4 Construction Funds**

This project consists of metalizing expansion joints, beam ends and chipping and metalizing abutment faces on Interstate 155 and IL Route 98 located on the west edge of Morton.

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.

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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.

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

I. GENERAL

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

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

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

II. ASSURANCES

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

B. Felons

1. The Illinois Procurement Code provides:

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

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

C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

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

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

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

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

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

The current salary of the Governor is \$171,000.00. Sixty percent of the salary is \$102,600.00.

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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.

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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.

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(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.**

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

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

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

M. Disclosure of Business Operations in Iran

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

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

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

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

Check the appropriate statement:

Company has no business operations in Iran to disclose.

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

NOTICE

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

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

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

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

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

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

TO BE RETURNED WITH BID

IV. DISCLOSURES

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

B. Financial Interests and Conflicts of Interest

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

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

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

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

C. Disclosure Form Instructions

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

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may check the following certification statement indicating that the information previously submitted by the bidder is, as of the date of submission, current and accurate. Before checking this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder checks the Certification, the Bidder should proceed to Form B instructions.

CERTIFICATION STATEMENT

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

(Bidding Company)



Signature of Authorized Representative

Date

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

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

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO ___
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$102,600.00? YES ___ NO ___
3. Does anyone in your organization receive more than \$102,600.00 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES ___ NO ___
4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than \$102,600.00? YES ___ NO ___

(Note: Only one set of forms needs to be completed per person per bid even if a specific individual would require a yes answer to more than one question.)

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

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

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

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

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

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

D. Bidders Submitting More Than One Bid

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

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

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

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

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

FOR INDIVIDUAL (type or print information)

NAME: _____

ADDRESS _____

Type of ownership/distributable income share:

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

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

(a) State employment, currently or in the previous 3 years, including contractual employment of services. Yes ___ No ___

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

1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois Toll Highway Authority? Yes ___ No ___

2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) provide the name the State agency for which you are employed and your annual salary. _____

RETURN WITH BID/OFFER

- 3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes ___ No ___

- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes ___ No ___

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

Yes ___ No ___

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

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

- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$102,600.00, (60 % of the Governor's salary as of 7/1/07) provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____

- 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$102,600.00, (60% of the salary of the Governor as of 7/1/07) are you entitled to receive (i) more then 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes ___ No ___

- 4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes ___ No ___

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

Yes ___ No ___

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

Yes ___ No ___

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

Yes ___ No ___

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

Yes ___ 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: _____ Date _____
Signature of Individual or Authorized Representative

NOT APPLICABLE STATEMENT

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

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

_____ Date _____
Signature of Authorized Representative

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 CHECKED

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

RETURN WITH BID

SPECIAL NOTICE TO CONTRACTORS

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

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

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

RETURN WITH BID

**Contract No. 68708
TAZEWELL County
Section D4 BRIDGE METALIZING 2008
Route FAI 155
District 4 Construction Funds**

PART II. WORKFORCE PROJECTION - continued

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

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

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

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

PART III. AFFIRMATIVE ACTION PLAN

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

Company _____ Telephone Number _____

Address _____

NOTICE REGARDING SIGNATURE

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

Signature: _____ Title: _____ Date: _____

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

RETURN WITH BID

**Contract No. 68708
TAZEWELL County
Section D4 BRIDGE METALIZING 2008
Route FAI 155
District 4 Construction Funds**

PROPOSAL SIGNATURE SHEET

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

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

Firm Name _____
By _____
(IF A CO-PARTNERSHIP) Business Address _____

Name and Address of All Members of the Firm:

Corporate Name _____
By _____
Signature of Authorized Representative

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

Corporate Name _____
By _____
Signature of Authorized Representative

Typed or printed name and title of Authorized Representative
(IF A JOINT VENTURE) Attest _____
Signature
Business Address _____

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



**Illinois Department
of Transportation**

Return with Bid

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

Item No. _____

Letting Date _____

KNOW ALL MEN BY THESE PRESENTS, That We _____

as PRINCIPAL, and _____

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

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

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

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

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

PRINCIPAL

(Company Name)

(Company Name)

By: _____
(Signature & Title)

By: _____
(Signature of Attorney-in-Fact)

Notary Certification for Principal and Surety

STATE OF ILLINOIS,

County of _____

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

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

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

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

My commission expires _____

Notary Public

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

Electronic Bid Bond ID#

Company / Bidder Name



Signature and Title

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

Name:
Address:
Phone No.

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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

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. 68708
TAZEWELL County
Section D4 BRIDGE METALIZING 2008
Route FAI 155
District 4 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., June 13, 2008. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.

2. DESCRIPTION OF WORK. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. 68708
TAZEWELL County
Section D4 BRIDGE METALIZING 2008
Route FAI 155
District 4 Construction Funds**

This project consists of metalizing expansion joints, beam ends and chipping and metalizing abutment faces on Interstate 155 and IL Route 98 located on the west edge of Morton.

3. INSTRUCTIONS TO BIDDERS. (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.

(b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.

4. AWARD CRITERIA AND REJECTION OF BIDS. This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the
Illinois Department of Transportation

Milton R. Sees, Secretary

BD 351 (Rev. 01/2003)

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2008

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

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

SUPPLEMENTAL SPECIFICATIONS

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RECURRING SPECIAL PROVISIONS

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STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2007, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of FAI Route 155 (I-155), Section D-4 Metalizing 2008 in Tazewell County and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

This project is located on Interstate 155 (I-155) in Tazewell County in District Four. Structure Numbers 090-0128 and 090-0129 are located on the northbound and southbound lanes on Interstate 155 (I-155) over Illinois Route 98 (IL 98) at the west edge of Morton.

DESCRIPTION OF PROJECT

This project consists of metalizing expansion joints and beam ends, and chipping and metalizing abutment faces of the structures carrying Interstate 155 over Illinois Route 98 in Tazewell County.

TRAFFIC CONTROL PLAN

Effective March 4, 2008

Traffic control shall be in accordance with the applicable sections of the "Standard Specifications for Road and Bridge Construction," the applicable guidelines contained in the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways," these Special Provisions, and any special details and Highway Standards contained herein and in the plans.

Special attention is called to Section 701 and Articles 107.09 and 107.14 of the "Standard Specifications for Road and Bridge Construction" and the following Highway Standards relating to traffic control:

- | | | | | | |
|--------|--------|--------|--------|--------|--------|
| 701001 | 701006 | 701101 | 701106 | 701400 | |
| 701401 | 701402 | 701406 | 701411 | 701601 | 702001 |

Changeable Message Board (One per direction affected):

Changeable message boards shall be placed on the mainline of Interstate 155 (I-155) three (3) days in advance of commencing work at each location.

Structure Numbers 090-0128 and 090-0129:

Traffic Control and Protection Standard 710401 shall be used for mainline of Interstate 155 and Traffic Control and Protection Standard 701601 shall be used for IL Route 98. Traffic Control and Protection Standard 701411 shall be used with both Traffic Control and Protection Standards 701401 and 701601.

THERMAL SPRAYING (METALIZING) BRIDGE CONCRETE SURFACE

Description: This work shall consist of furnishing all labor, equipment, technical assistance, and materials necessary to clean and apply “sprayed-on” galvanic protection onto blast-cleaned bridge concrete surface for the purpose of reducing and preventing further corrosive degradation.

A specified wire is fed through an electric arc machine into a plasma stream and sprayed onto the cleaned concrete and exposed reinforcement bar or steel bearing/plate surfaces using compressed air forming a protective, conductive coating.

The existing reinforcement is exposed due to insufficient concrete cover. The intent of this work is to protect this reinforcement from further corrosion. Since the bars are already exposed, continuity is assured between the metalizing allow (the anode) and the reinforcing steel (the cathode). Additional continuity redundancy in the form of anode connector plates drilled and tapped to embedded reinforcing steel will not be required.

Materials:

- (a) **Zinc Wire:** The wire used for metalizing shall be an 85/15 zinc/aluminum alloy according to ASTM B-833, Standard Specification for Zinc Wire Thermal Spraying. Acceptable variations of this wire have been developed by Corpro Company for thermal spraying. An equivalent compatible product shall be submitted to the Engineer for approval prior to beginning application.
- (b) **Abrasive:** Blast material shall be hard and sharp in order to produce an angular surface profile. Acceptable examples are; angular aluminum oxide, angular steel grit, and angular crushed slag. Silica sand or steel shot which produce a rounded surface profile when blasted are not acceptable. A sample of the abrasive shall be submitted to the Engineer prior to surface preparation for testing and approval.

Abrasive suppliers shall certify that abrasives are not oil contaminated and shall have a water extract pH value range of 6 to 8. All surfaces prepared with abrasives that are oil contaminated or have a PH outside of the specified range shall be cleaned with solvent cleaner or low pressure water as directed by the Engineer and re-blasted by the Contractor at their own expense.

- (c) **Compressed Air:** Prior to using compressed air for abrasive blast cleaning, and metalizing, the Contractor shall verify that the compressed air is free of all moisture and oil contamination according to ASTM D 4285. The tests shall be conducted before blasting is

begun and anytime at the request of the project Engineer for each of the compressor systems in operation. If air contamination is evident, the Contractor shall change filters, clean traps, add moisture separators or filters, and include any other quality assurance measures necessary to achieve clean, dry, air. A thorough inspection shall also be conducted by the Contractor of the work performed since the previous acceptable test for defects of contamination caused by the compressed air systems. All effected work shall be corrected at the Contractor's expense.

- (d) Metalizing Equipment: The metalizing unit shall be of gas or arc type and be used according to the manufacturer's recommendations. The equipment shall have gages capable of accurately measuring fluid and air pressures and have valves capable of regulating the flow of air, water, current, and feedstock as recommended by the equipment manufacturer. The equipment shall be maintained in proper working order and be of adequate capacity to satisfactorily complete the work in a timely manner.

CONSTRUCTION REQUIREMENTS

General: Technical assistance provided by the manufacturer during surface spraying shall be furnished at no additional cost to the Department. The Contractor shall furnish the Engineer with the manufacturer's written product information, handbooks, brochures, and any other installation and instructional materials necessary to operate the equipment properly at least two weeks prior to job application. The Contractor, the manufacturer's representative, and the Engineer shall meet to review and clarify cleaning requirements, machine operations and installation procedures prior to starting the work. A technical representative shall be present at the start of the cleaning preparations and spraying operation as an advisor/instructor for at least four (4) hours.

(a) Surface Preparation:

- (1) Concrete Removal. Removal of all loose, delaminating and spalling concrete shall be removing by the hand method (light weight hammers) as determined by the Engineer. The intent of the removal is a minimum of 1/2" to 2" inches to achieve a sound patch.
- (2) Blast-cleaning. All visible concrete patches shall be blast-cleaned. A separate pass of the blast nozzle for each surface face, for the full length of proposed coating area will be required. The nozzle shall be held at an angle of 30-90 degrees to the beam face, at a distance of 25-50 mm (1-2 inches). All cleaned surface areas shall to be inspected by the Engineer for written acknowledgment of acceptance before any coating or protective metalizing is applied.
- (3) To be considered acceptable when the bridge concrete surfaces have a roughened surface with clean exposed aggregate. The surfaces shall be dry and free of any foreign matter.
- (4) For exposed reinforcement bar in the faces of the concrete repair area, acceptable cleaning shall be when all corrosion, paint, chlorides, sediments, or other foreign

materials are re-moved from the steel. An acceptable inspection shall result in leaving a near-white SSPC-SP10 degree of cleanliness over the designated area specified in the plans.

- (5) If the surface is degraded or contaminated subsequent to surface preparation and prior to metalizing, it shall be re-blasted before metalizing. Cleaning of all surfaces shall be approved by the Engineer prior to metalizing.
- (b) Metalizing: This procedure governs the methods, requirements, and procedures for applying thermal sprayed metal onto the surfaces of the bridge concrete. The process consists of melting metal and spraying it onto a prepared surface by means of compressed gas. The thickness of the coating shall be 250~300 microns (10~12 mils) in two passes measured as specified by SSPC-PA2. The requirements as outlined in the Steel Structure Paint Council's Guide for "Thermal Spray Metallic Coating Systems" (SSPC CS-Guide 23.00) shall be followed and considered to be a part of this special provision.
- (1) No surface shall be sprayed before being prepared by pressure blasting or that shows any sign of a presence of scale or moisture. All metalizing shall be applied within a maximum of four hours from when blasting of that same area was completed. Spraying shall be done in a block pattern not to exceed 600mm (two feet) on a side with overlapping passes to insure uniform coverage.
 - (2) To produce required thickness and uniformity, a minimum of two passes is required, overlapping and at right angles to each other. The gun shall be held at such a distance from the work surfaces 125mm (5~9 in) so that the metal is still plastic on impact. The coating shall be firmly adherent and uniform, free from uncoated spots, lumps or blisters, and have a fine sprayed texture.
 - (3) To the maximum extent practicable, metalizing shall be applied as a continuous film of uniform thickness free of pores. All thin spots or areas missed in the application shall be re-metalized. The coating shall be checked for thickness by means of an approved thickness gauge. The Contractor shall be required to add metalizing to any areas that fail to register minimum thickness before oxidation of any of the surface occurs.
- (c) Field Testing: The Engineer will perform the following test for adhesion on the metalized surface of the concrete beam and will cut through the coating with a knife. If the metalizing or any part of it can be lifted from the base concrete 6mm (1/4 in.) or more ahead of the cutting blade without actually scraping the concrete, the surface preparation shall be deemed improper and the coating will be considered unsatisfactory.

Two locations on each patch greater than two square feet (2 sq. ft.) shall be tested for adhesion by the aforementioned method. All areas tested shall be repaired and re-metalized according to this special provision. In the event the Contractor's coating does not meet the test requirements, the Contractor shall be required to correct the coating by an acceptable method of removal and replacement to produce an approved surface.

The Contractor shall test the coating using a Hydraulic Adhesion Test Gauge achieving a minimum of 600 psi.

Method of Measurement: The area receiving the metalized coating shall be measured in square feet of patch.

Basis of Payment: The work shall be paid for at the contract unit price per square foot for BRIDGE CONCRETE SURFACE and per square foot for THERMAL SPRAYING (METALIZING) BRIDGE CONCRETE SURFACE for the actual quantity completed.

THERMAL SPRAYING (METALIZING) BRIDGE JOINT STEEL

Scope of Work: This work shall consist of the preparation of all designated metal surfaces by the method(s) specified on the plans in the General Notes. This work also includes the application of a thermally sprayed metallic coating (metalizing) of those designated surfaces with the metalizing system(s) specified on the plans. The Contractor shall furnish all materials, equipment, labor, and other essentials necessary to accomplish this work and all other work described herein and as directed by the Engineer.

Materials: All metalizing feedstock material to be used shall be produced by the same manufacturer and meet the thermal spray equipment manufacturer's specifications.

- a) The size of the feedstock material shall be the appropriate size as required by the equipment manufacturer.
- b) The thickness of the metalizing shall be 250-300 microns (10 - 12 mils) measured as specified by SSPC-PA2.
- c) The wire used for metalizing shall be 85/15 zinc/aluminum per ASTM B-833, Standard Specification for Zinc Wire for Thermal Spraying (Metalizing). The certification results shall be provided to the Engineer by the Contractor prior to the start of work.

Submittals: The Contractor shall submit for Engineer review and acceptance, the following plans and information for completing the work. The submittals shall be provided within 30 days of execution of the contract unless given written permission by the Engineer to submit them at a later date. Work cannot proceed until the submittals are accepted by the Engineer. Details for each of the plans are presented within the body of this specification.

- a) Quality Control (QC) Program. The QC Program shall identify the following: the instrumentation that will be used, a schedule of required measurements and observations, procedures for correcting unacceptable work, and procedures for improving surface preparation and metalizing quality as a result of quality control findings. The program shall incorporate at a minimum, the IDOT Quality Control Daily Report Forms as supplied by the Engineer.
- b) Progress Schedule. Progress schedule shall be submitted per Article 108.02 and shall identify all major work items.

When the Engineer accepts the submittals, the Contractor will receive written notification. The Contractor shall not begin any cleaning and/or metalizing work until the Engineer has accepted the submittals. The Contractor shall not construe Engineer acceptance of the submittals to imply approval of any particular method or sequence for conducting the work, or for addressing health and safety concerns. Acceptance of the programs does not relieve the Contractor from the responsibility to conduct the work according to the requirements of Federal, State, or Local regulations and this specification, or to adequately protect the health and safety of all workers involved in the project and any members of the public who may be affected by the project. The Contractor remains solely responsible for the adequacy and completeness of the programs and work practices, and adherence to them.

Quality Control (QC) Inspections. The Contractor shall perform first line, in process QC inspections. The designated Quality Control inspector shall be onsite full time during any operations that affect the quality of the coating system (e.g., surface preparation and chloride remediation, metalizing application, and evaluation of metalizing upon project completion). The Contractor shall use the IDOT Quality Control Daily Report forms supplied by the Engineer to record the results of quality control tests. The completed reports shall be turned into the Engineer before work resumes the following day.

Contractor QC inspections shall include, but not be limited to the following:

- Suitability of protective coverings and the means employed to control project debris, and etc.
- Ambient conditions
- Surface preparation (solvent cleaning, abrasive blast cleaning, and etc.)
- Chloride remediation
- Thermal Spray application (specified materials, and dry film thickness)
- Coating continuity and coverage (freedom from overspray, dry spray build-up, pinholes, skips, misses, etc.)

The personnel managing the Contractor's QC Program shall possess a minimum classification as a National Association of Corrosion Engineers (NACE) Coating Inspector Technician, or shall provide evidence of successful inspection of two (2) projects of similar or greater complexity and scope that have been completed in the last (1) year. References shall include the name, address, and telephone number of a contact person employed by the bridge owner.

The personnel performing the QC tests shall be trained in coatings inspection, thermal spray application and the use of the testing instruments. Documentation of training shall be provided. The QC personnel shall not perform hands on surface preparation or metalizing activities. Applicators shall perform dry film thickness measurements, with QC personnel conducting random spot checks. The Contractor shall not replace the QC personnel assigned to the project without advance notice to the Engineer, and acceptance of the replacement(s), by the Engineer.

The Contractor shall supply all necessary equipment to perform the QC inspections. Equipment shall include the following at a minimum:

- Psychrometer or comparable equipment for the measurement of dew point and relative humidity, together with all necessary weather bureau tables or psychrometric charts.
- Surface temperature thermometer.
- Hypodermic Needle Pressure Gage for determining blasting pressure at the nozzle.
- SSPC Visual Standards VIS 1 for abrasive blast cleaning, VIS 4 for water jetting, and/or VIS 5 for wet abrasive blast cleaning, as applicable.
- Testex Press-O-Film Replica Tape and Spring Micrometer.
- Bresle Cell Kits or CHLOR*TEST kits for chloride determinations, or equivalent.
- Blotter paper and plate glass for compressed air cleanliness checks.
- Type 2 Magnetic Dry Film Thickness Gage per SSPC - PA2.
- Calibration standards for dry film thickness gage.
- All applicable ASTM, ANSI, AWS, and SSPC Standards used for the work (reference list attached).

The instruments shall be calibrated by the Contractor's personnel according to the equipment manufacturer's recommendations and the Contractor's QC Program. All inspection equipment shall be made available to the Engineer for QA observations on an as needed basis.

Quality Assurance (QA) Observations: The Engineer will conduct QA observations of any or all phases of the work. The presence or activity of Engineer observations in no way relieves the Contractor of the responsibility to provide all necessary daily QC inspections of his/her own and to comply with all requirements of this specification.

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

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

Surface Preparation and Metalizing Equipment: The metalizing unit shall be a gun manufactured by an established domestic company. The arc type is acceptable and recommended. The equipment shall be used according to manufacturer's recommendations. No surface shall be sprayed which shows any sign of rust, scale or moisture. All metalizing shall be applied within a maximum of five (5) hours of the blasting. Spraying shall be done with overlapping passes to ensure uniform coverage.

The gun shall be held at such a distance from the work surfaces that the metal is still plastic on impact 125mm – 230mm (5 to 9 inches). The coating shall be firmly adherent and free from uncoated spots, lumps or blisters, and have a fine sprayed texture.

To the maximum extent practicable, metalizing shall be applied as a continuous film of uniform thickness free of pores. All thin spots or areas missed in the application shall be re-metalized.

All cleaning and metalizing equipment shall include gages capable of accurately measuring fluid and air pressures and shall have valves capable of regulating the flow of air, water, current or feedstock as recommended by the equipment manufacturer. The equipment shall be maintained in proper working order and be of size or capacity to satisfactorily complete the work.

Metalizing and surface preparation equipment shall utilize filters, traps or separators recommended by the manufacturer of the equipment and shall be kept clean to prevent oil, water, dried paint and other foreign materials from being deposited on the surface. The filters, traps and separators shall be cleaned or drained by means, and at intervals, recommended by the manufacturer of the equipment.

Pressure type abrasive air blasting equipment shall be capable of supplying a minimum of 690kPa (100psi) pressure and 120 L/S (250 CFM) capacity with all air blast nozzles being used. If blast nozzle orifice sizes larger than 9.5 mm (3/8") are being used, the minimum capacity of the equipment shall be increased in accordance with the recommendations of SSPC Good Painting Practice, Volume 1, Chapter 2.4, Table 1. The pressure will be measured at the blast nozzle. The equipment shall be capable of providing the minimum required pressure and volume, free of oil, water and other contaminants.

Test Sections: Before any metalizing is done, the Contractor shall prepare a test section for each batch or lot of wire supplied. The Contractor shall submit to the Engineer a steel plate approximately 300mm x 300mm (12" x 12") to which the metal has been deposited to the specified thickness, as checked with a magnetic or Eddy Current Gage, for acceptance by the Engineer as to grain size and texture of the sprayed metal. The test plate will be used to determine the acceptance of the finished job.

The Engineer will perform the following test for adhesion on the metalized surface of the test plate. He/she will cut through the coating with a knife or chisel, if the metalizing or any part of it can be lifted from the base metal 6mm (1/4") or more ahead of the cutting blade without actually cutting the metal, the surface preparation will be deemed improper and the coating will be considered unsatisfactory. Each spray operator shall be qualified to metalize according to ANSI/AWS C2.18-93. Any operator who does not show evidence of qualification shall not be allowed to spray.

Protective Coverings and Damage: All portions of the structure that could be damaged by the surface preparation and metalizing operations shall be protected by covering or shielding. The Contractor shall comply with the provisions of the Illinois Environmental Protection Act. Metalizing overspray is not permitted to escape into the air or onto any other surfaces or surrounding property not intended to be metalized. The contractor shall evaluate project-specific conditions to determine the specific type and extent of containment needed to control emissions.

The Contractor shall be responsible for any damage caused to persons, vehicles, or property, except as indemnified by the Response Action Contractor Indemnification Act. Whenever the intended purposes of the controls or protective devices used by the Contractor are not being

accomplished, as determined by the Engineer, work shall be immediately suspended until corrections are made. Damage to vehicles or property shall be repaired by the Contractor at the Contractor's expense. Metalized surfaces damaged by any Contractor's operation shall be repaired, removed and/or re-metalized, as directed by the Engineer, at the Contractor's expense.

Weather Conditions: The surfaces to be metalized after surface preparation must remain free of moisture and other contaminants. The Contractor shall control his/her operations to insure that dust, dirt or moisture does not come in contact with surfaces prepared that day. In addition to the metalizing system's manufacturer's written instructions for surface preparation, and metalizing, the following conditions shall apply. (When in conflict, the most restrictive conditions shall govern).

- (1) The minimum steel and air temperatures shall be 4° C (40° F). Metalizing shall not be applied to steel which is at a temperature that will cause blistering, porosity or otherwise detrimental to the life of the metalizing. Metalizing shall not be applied in rain, wind, snow, fog or mist, or when the steel surface temperature is less than 3° C (5° F) above the dew point. Metalizing shall not be applied to wet, damp or frosted surfaces. Metalizing shall not be applied when the relative humidity is above 85%.
- (2) Metalizing will not be permitted when wind velocities are greater than 24 kph (15 MPH).
- (3) The Contractor shall monitor temperature, dew point, and relative humidity every four (4) hours during surface preparation and coating application in the specific areas where the work is being performed. The frequency of monitoring shall increase if weather conditions are changing. The Engineer has the right to reject any work that was performed under unfavorable weather conditions. Rejected work shall be removed, re-cleaned, and metalized at the Contractor's expense.

These conditions will be verified by the Engineer at locations representative of the surfaces to be cleaned, and metalized. Work accomplished under unfavorable weather conditions will be considered unacceptable and complete re-cleaning and metalizing of these areas will be required at the Contractor's expense.

Compressed Air Cleanliness: Prior to using compressed air for abrasive blast cleaning, blowing down the surfaces, and metalizing, the Contractor shall verify that the compressed air is free of moisture and oil contamination according to the requirements of ASTM D 4285. The tests shall be conducted at least one time each shift for each compressor system in operation. If air contamination is evident, the Contractor shall change filters, clean traps, add moisture separators or filters, or make other adjustments as necessary to achieve clean, dry air. The Contractor shall also examine the work performed since the last acceptable test for evidence of defects or contamination caused by the compressed air. Effectuated work shall be repaired at the Contractor's expense.

Solvent Cleaning: The Contractor shall notify the Engineer 24-hours in advance of beginning surface preparation operations.

- a) All traces of asphaltic cement, oil, grease, diesel fuel deposits, and other soluble contaminants on the steel surfaces to be metalized shall be removed by solvent cleaning according to SSPC-SP1, supplemented with scraping (e.g., to remove large deposits of asphaltic cement) as required. The name and composition of solvents, together with MSDS, shall be submitted for Engineer acceptance prior to use.

Under no circumstances shall abrasive blast cleaning, wet abrasive blasting, or water jetting be performed in areas containing surface contaminants or in areas where the Engineer has not accepted the solvent cleaning. Rejected surfaces shall be re-cleaned with both solvent and the specified mechanical means at the Contractor's expense.

Prior to mechanical cleaning, oil, grease, and other soluble contaminants on bare steel or rusted surfaces shall be removed by solvent cleaning according to SSPC-SP1.

Surface Preparation: In each case, as part of the surface preparation process, soluble salts shall be remediated as specified under "Soluble Salt Remediation".

- a) Limited Access Areas: A best effort with the specified methods of cleaning shall be performed in limited access areas such as narrow joints (typically less than 1.5 inches in width). The equipment being used for the majority of the cleaning may need to be supplemented with other commercially available equipment, such as angle nozzles, to properly clean the limited access areas. The acceptability of the best effort cleaning in these areas is at the sole discretion of the Engineer.

It is not the intent of this work to blast clean and metalize the entire face of the steel joint plates. Rather, the "depth" of treatment shall be limited to no less than 1/2" deeper than the depth of the silicone sealant's bonding surface area (sealer done by others). This will result in a depth of treatment no more than two (2") to three (3") inches down from the top of the joint.

- b) Near White Metal Blast Cleaning: This surface preparation shall be accomplished according to the requirements of Near White Metal Blast Cleaning SSPC-SP 10. The designated surfaces shall be prepared by dry abrasive blast cleaning, wet abrasive blast cleaning, or water jetting with abrasive injection. A Near White Metal Blast Cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter, except for staining.

Random staining shall be limited to no more than 5 percent of each 58 sq. cm. (9 sq. in.) of surface area and may consist of light shadows, slight streaks, or minor discoloration caused by stains of rust, stains of mill scale, or stains of previously applied paint. With the exception of crevices as defined below, surface discoloration is considered to be a residue that must be removed, rather than a stain, if it possesses enough mass or thickness that it can be removed as a powder or in chips when scraped with a pocketknife.

A surface profile shall be created on the steel as defined later under "Surface Profile."

At the discretion of the Engineer, after a best effort cleaning, slight traces of existing coating may be permitted to remain within crevices such as those created between rivets, bolts, and plates, and the underlying steel. When traces of coating are permitted to remain, the coating shall be tightly bonded when examined by probing with a dull putty knife. The traces of coating shall be confined to the bottom portion of the crevices only, and shall not extend onto the surrounding steel or plate or onto the outer surface of the rivets or bolts. Pitted steel is excluded from exemption considerations and shall be cleaned according to SSPC-SP10.

If the surfaces are prepared using wet abrasive methods, attention shall be paid to tightly configured areas to assure that the preparation is thorough. After surface preparation is completed, the surfaces, surrounding steel, and containment materials/scaffolding shall be rinsed to remove abrasive dust and debris. Potable water shall be used for all operations. An inhibitor may be added to the supply water and/or rinse water to prevent flash rusting. If a rust inhibitor is proposed, the Contractor shall provide a sample of the proposed inhibitor together with a letter from the coating manufacturer indicating that the inhibitor is suitable for use with their products. The surfaces shall be allowed to completely dry before the application of any coating.

If the surface is degraded or contaminated subsequent to surface preparation and prior to metalizing, the surface shall be re-blasted before metalizing. All surface cleaning shall be approved by the Engineer prior to metalizing.

Abrasives: When abrasive blast cleaning is specified, it shall be performed using either expendable abrasives (other than silica sand) or recyclable steel grit abrasives. Expendable abrasives shall be used one time and disposed of. Abrasive suppliers shall certify that the expendable abrasives meet the requirements of SSPC-AB1 and that recyclable steel grit abrasives meet AB3. The Contractor shall verify that recycled abrasives meet the requirements of SSPC-AB2 during use.

Abrasive suppliers shall certify that abrasives are not oil contaminated and shall have a water extract pH value within the range of 6 to 8. All surfaces prepared with abrasives which are oil contaminated or have a pH outside the specified range shall be cleaned with solvent cleaner or low pressure water as directed by the Engineer and re-blasted by the Contractor at his/her expense.

Surface Profile (HOLD POINT): The abrasives used for blast cleaning shall have a gradation such that the abrasive will produce a uniform surface profile of 38 to 90 microns (2.5 to 4.5 mils). If the profile requirements of the feedstock manufacturer are more restrictive, advise the Engineer and comply with the more restrictive requirements. For recycled abrasives, an appropriate operating mix shall be maintained in order to control the profile within these limits.

The average surface profile produced by the Contractor's surface preparation procedures will be determined at the beginning of the work and as required by the Engineer using a profile depth tape and micrometer. Profile depth tape measurements shall be retained and included with QA documents. Single measurements less than 64 microns(2.5 mils) or greater than 114 microns (4.5 mils) blast profile, or as determined by the Engineer, will be considered unacceptable.

Areas having unacceptable measurements will be further tested to determine the limits of the deficient area. If unacceptable profiles are provided, work will be suspended.

Soluble Salt Remediation (HOLD POINT): The Contractor shall implement surface preparation procedures and processes that will remove chloride from the surfaces.

Methods of chloride removal may include, but are not limited to, steam cleaning or pressure washing with or without the addition of a chemical soluble salt remover as approved by the feedstock manufacturer, and scrubbing before or after initial paint removal. The Contractor may also elect to clean the steel and allow it to rust overnight followed by re-cleaning, or by utilizing blends of fine and coarse abrasives during blast cleaning, wet abrasive/water jetting methods of preparation, or combinations of the above.

Upon completion of the chloride remediation steps, the Contractor shall use cell methods of field chloride extraction and test procedures (e.g., silver dichromate) accepted by the Engineer, to test representative surfaces that were previously rusted (e.g., pitted steel) for the presence of remaining chlorides. Remaining chloride levels shall be no greater than $7\mu\text{g}/\text{sq cm}$ as read directly from the surface without any multiplier applied to the results. The testing must be performed, and the results must be acceptable, prior to painting each day.

A minimum of one (1) test per joint shall be conducted at project start up. If results greater than $7\mu\text{g}/\text{sq cm}$ are detected, the surfaces shall be recleaned and retested at the same frequency.

Following successful chloride testing, the chloride test areas shall be cleaned to the requirements of Near White Metal Blast Cleaning SSPC-SP 10.

Surface Condition Prior to Metalizing (HOLD POINT): Prepared surfaces, shall meet the requirements of the respective degrees of cleaning immediately prior to metalizing, and shall be metalized within five (5) hours of blast cleaning. If rust appears or bare steel remains unmetalized for more than five (5) hours, the affected area shall be prepared again at the expense of the Contractor.

The quality of surface preparation and cleaning of surface dust and debris must be accepted by the Engineer prior to metalizing. The Engineer has the right to reject any work that was performed without adequate provision for QA observations to accept the degree of cleaning. Rejected coating work shall be removed and replaced at the Contractor's expense.

Special Instructions: Removal of all debris, rust and waste generated by this work from the job site is the Contractor's responsibility and included in the Lump Sum Price.

It is understood and agreed that the cost of all work outlined above, unless otherwise specified, has been included in the bid, and no extra compensation will be allowed.

Basis of Payment: This work shall be paid for at the contract lineal foot price for BLAST CLEANING STEEL OR CONCRETE, and for THERMAL SPRAYING (METALIZING) STEEL DECK JOINTS, and shall include all work specified herein.

Appendix 1 – Reference List

The Contractor shall maintain the following regulations and references on site for the duration of the project:

- Illinois Environmental Protection Act
- ASTM D 4285, Standard Test Method for Indicating Oil or Water in Compressed Air
- SSPC-AB 1, Mineral and Slag Abrasives
- SSPC-AB 2, Specification for Cleanliness of Recycled Ferrous Metallic Abrasives
- SSPC-AB 3, Newly Manufactured or Re-Manufactured Steel Abrasives
- SSPC-PA 2, Measurement of Dry Coating Thickness with Magnetic Gages
- SSPC-SP 1, Solvent Cleaning
- SSPC-SP 10/NACE No. 2, Near White Metal Blast Cleaning
- SSPC-SP 12/NACE No. 5, Surface Preparation and Cleaning of Metals by Water jetting Prior to Recoating
- SSPC-VIS 1, Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning
- SSPC-VIS 4, Guide and Reference Photographs for Steel Cleaned by Water Jetting
- SSPC-VIS 5, Guide and Reference Photographs for Steel Prepared by Wet Abrasive Blast Cleaning
- ASTM B833 “Standard Specifications for Zinc Wire for Thermal Spraying (Metalizing)”.
- ANSI/AWS C2.18 “Guide for the Protection of Steel with Thermal Sprayed Coatings of Aluminum and Zinc and their Alloys and Composites”, and current revisions to 1999.
- The metalizing feedstock and applicator manufacture’s application instructions, MSDS and product data sheets.

CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES

Effective: November 25, 2004

Revised: January 1, 2007

Description. This work shall consist of the containment, collection, temporary storage, transportation and disposal of waste from non-lead paint removal projects. Waste requiring containment and control includes, but is not limited to, old paint, spent abrasives, corrosion products, mill scale, dirt, dust, grease, oil, and salts.

General. This specification provides the requirements for the control of paint removal waste when the existing coatings do not contain lead. If the coatings contain lead, use specification "Containment and Disposal of Lead Paint Cleaning Residues." The Contractor shall take reasonable and appropriate precautions to protect the public from the inhalation or ingestion of dust and debris from their paint removal and clean up operations and is responsible for the clean-up of all spills of waste at no additional cost to the Department.

The Contractor shall comply with the requirements of this Specification and all applicable Federal, State, and Local laws, codes, and regulations, including, but not limited to the regulations of the United States Environmental Protection Agency (USEPA), Occupational Safety and Health Administration (OSHA), and Illinois Environmental Protection Agency (IEPA). The Contractor shall comply with all applicable regulations even if the regulation is not specifically referenced herein. If a Federal, State, or Local regulation is more restrictive than the requirements of this Specification, the more restrictive requirements shall prevail.

Submittals. The Contractor shall submit for Engineer review and acceptance, the following drawings and plans for accomplishing the work. The submittals shall be provided within 30 days of execution of the contract unless given written permission by the Engineer to submit them at a later date. Work cannot proceed until the submittals are accepted by the Engineer. Details for each of the plans are presented within the body of this specification.

- a) Containment Plans. The containment plans shall include drawings, equipment specifications, and calculations (e.g., wind load). The plans shall include copies of the manufacturer's specifications for the containment materials and equipment that will be used to accomplish containment and ventilation.
- b) When required by the contract plans, the containment submittal shall provide calculations that assure the structural integrity of the bridge when it supports the containment and the calculations and drawings shall be signed and sealed by a Structural Engineer licensed in the state of Illinois.

When working over the railroad or navigable waterways, the Department will notify the respective agencies that work is being planned. Unless otherwise directed by the Engineer, the Contractor is responsible for follow up contact, and shall provide evidence that the railroad, Coast Guard, Corps of Engineers, and other applicable agencies are satisfied with the clearance provided and other safety measures that are proposed.

- c) Waste Management Plan. The Waste Management Plan shall address all aspects of waste handling, storage, testing, hauling and disposal. Include the names, addresses, and a contact person for the proposed licensed waste haulers and disposal facilities. Submit the name and qualifications of the laboratory proposed for Toxicity Characteristic Leaching Procedure (TCLP) analysis.
- d) Contingency Plan. The Contractor shall prepare a contingency plan for emergencies including fire, accident, failure of power, failure of supplied air system or any other event that may require modification of standard operating procedures. The plan shall include specific procedures to ensure safe egress and proper medical attention in the event of an emergency.

When the Engineer accepts the submittals, the Contractor will receive written notification. The Contractor shall not begin any work until the Engineer has accepted the submittals. The Contractor shall not construe Engineer acceptance of the submittals to imply approval of any particular method or sequence for conducting the work, or for addressing health and safety concerns. Acceptance of the plans does not relieve the Contractor from the responsibility to conduct the work according to the requirements of Federal, State, or Local regulations, this specification, or to adequately protect the health and safety of all workers involved in the project and any members of the public who may be affected by the project. The Contractor remains solely responsible for the adequacy and completeness of the programs and work practices, and adherence to them.

Quality Control (QC) Inspections. The Contractor shall perform first line, in process QC inspections of all environmental control and waste handling aspects of the project to verify compliance with these specification requirements and the accepted drawings and plans. Contractor QC inspections shall include, but not be limited to the following:

- Proper installation and continued performance of the containment system(s) in accordance with the approved drawings.
- Visual inspections of emissions into the air and verification that the cause(s) for any unacceptable emissions is corrected.
- Visual inspections of spills or deposits of contaminated materials into the water or onto the ground, pavement, soil, or slope protection. Included is verification that proper cleanup is undertaken and that the cause(s) of unacceptable releases is corrected.
- Proper implementation of the waste management plan including laboratory analysis and providing the results to the Engineer within the time frames specified herein.
- Proper implementation of the contingency plans for emergencies.

Quality Assurance (QA) Observations. The Engineer will conduct QA observations of any or all of the QC monitoring inspections that are undertaken. The presence or activity of Engineer observations in no way relieves the Contractor of the responsibility to provide all necessary daily QC inspections of its own and to comply with all requirements of this Specification.

Containment Requirements. The Contractor shall install and maintain containment systems surrounding the work for the purpose of controlling emissions of dust and debris according to the requirements of this specification. Working platforms and containment materials that are used shall be firm and stable and platforms shall be designed to support the workers, inspectors, spent surface preparation media (e.g., abrasives), and equipment during all phases of surface preparation and painting. Platforms, cables, and other supporting structures shall be designed according to OSHA regulations. If the containment needs to be attached to the structure, the containment shall be attached by bolting, clamping, or similar means. Welding or drilling into the structure is prohibited unless approved by the Engineer in writing.

The containment shall be dropped in the event of sustained winds of 40 mph (64 kph) or greater and all materials and equipment secured.

The Contractor shall provide drawings showing the containment system and indicating the method(s) of supporting the working platforms and containment materials to each other and to the bridge.

When directed in the contract plans, the Contractor shall submit calculations and drawings, signed and sealed by a Structural Engineer licensed in the state of Illinois, that assure the structural integrity of the bridge under the live and dead loads imposed, including the design wind loading.

When working over railroads, the Contractor shall provide evidence that the proposed clearance and the safety provisions that will be in place (e.g., flagman) are acceptable to the railroad. In the case of work over navigable waters, the Contractor shall provide evidence that the proposed clearance and provisions for installing or moving the containment out of navigation lanes is acceptable to authorities such as the Coast Guard and Army Corps of Engineers. The Contractor shall include plans for assuring that navigation lighting is not obscured, or if it is obscured, that temporary lighting is acceptable to the appropriate authorities (e.g., Coast Guard) and will be utilized.

Engineer review and acceptance of the drawings and calculations shall not relieve the Contractor from the responsibility for the safety of the working platforms and containment. After the work platforms and containment materials are erected additional measures may be needed to ensure worker safety according to OSHA regulations. The Contractor shall institute such measures at no additional cost to the Department.

Containment for the cleaning operation of this contract is defined as follows:

- The containment system shall confine emissions of dust and debris to the property line.
- The containment systems shall comply with the specified SSPC Guide 6 classifications, as applicable, as presented in Table 1 for the method of paint removal utilized.

The Contractor shall take appropriate action to avoid personnel injury or damage to the structure from the installation and use of the containment system. If the Engineer determines that there is the potential for structural damage caused by the installed containment system, the Contractor shall take appropriate action to correct the situation.

The containment systems shall also meet the following requirements:

- a) Dry Abrasive Blast Cleaning - (SSPC Class 4A)

The enclosure shall be designed, installed, and maintained to sustain maximum anticipated wind forces. Flapping edges of containment materials are prohibited and the integrity of all containment materials shall be maintained for the duration of the project. When the location of the work on the bridge, or over lane closures permit, the blast enclosure shall extend a minimum of 3 ft (1 m) beyond the limits of surface preparation to allow the workers to blast away from, rather than into the seam between the containment and the structure.

- b) Vacuum Blast Cleaning

Vacuum blasting equipment shall be fully automatic and capable of cleaning and recycling the abrasive. The system shall be designed to deliver cleaned, recycled blasting abrasives and provide a closed system containment during blasting. The

removed coating, mill scale, and corrosion shall be separated from the abrasive, and stored for disposal. No additional containment is required but escaping abrasive, paint chips, and debris shall be cleaned from the work area at the end of each day.

c) Power Tool Cleaning (SSPC-Class 3P)

The Contractor shall use containment materials (e.g., tarpaulins) to capture removed paint chips, rust, mill scale and other debris.

d) Vacuum-Shrouded Power Tool Cleaning/Hand Tool Cleaning

The Contractor shall utilize hand tools or power tools equipped with vacuums and High Efficiency Particulate Air (HEPA) filters. No additional containment is required but escaping and paint chips and debris shall be cleaned from the work area at the end of each day.

d) Water Jetting or Wet Abrasive Blast Cleaning for the Removal of Paint (SSPC Class 4W)

Water jetting or wet abrasive blast cleaning for the purpose of removing paint and surface debris shall be conducted within a containment designed, installed, and maintained in order to capture paint chips and debris. Collection of the water is not required. Mesh containment materials that capture paint chips and debris while allowing the water to pass through shall have openings a maximum of 25 mils (625 microns) in greatest dimension.

e) Water Washing

Water washing of the bridge for the purpose of removing chalk, dirt, grease, oil, bird nests, and other surface debris can be performed without additional containment provided paint chips and removed debris are removed and collected prior to washing or are cleaned from the site after cleaning is completed each day. At the Contractor's option, SSPC Class 4W permeable containment materials described above under "Water Jetting or Wet Abrasive Blast Cleaning for the Removal of Paint" can be used to collect the debris while the washing is underway.

Environmental Controls

- a) Cleanliness of ground and water. At the end of each workday at a minimum, the work area outside of containment, including any ground tarpaulins that are used, shall be inspected to verify that paint removal debris (e.g., paint chips, abrasives, rust, etc.) is not present. If debris is observed, it shall be removed by hand, shoveling, sweeping, or vacuuming. Upon project completion, the ground and water in and around the project site are considered to have been properly cleaned if paint chips, paint removal media (e.g., spent abrasives), fuel, materials of construction, litter, or other project debris have been removed, even if the material being cleaned was a pre-existing condition.

- b) Visible Emissions. Emissions of dust and debris from the project shall not extend beyond the property line. If unacceptable visible emissions or releases beyond the property line are observed, the Contractor shall immediately shut down the emission-producing operations, clean up the debris, and change work practices, modify the containment, or take other appropriate corrective action as needed to prevent similar releases from occurring in the future.

Hygiene Facilities/Protective Clothing. The Contractor shall provide clean lavatory and hand washing facilities according to OSHA regulations and make them available to IDOT project personnel.

The Contractor shall provide IDOT project personnel with all required protective clothing and equipment, including disposal or cleaning. Clothing and equipment includes but is not limited to disposable coveralls with hood, booties, disposable surgical gloves, hearing protection, and safety glasses. The protective clothing and equipment shall be provided and maintained on the job site for the exclusive, continuous and simultaneous use by the IDOT personnel. This equipment shall be suitable to allow inspection access to any area in which work is being performed.

Site Emergencies.

- a) Stop Work. The Contractor shall stop work at any time the conditions are not within specifications and take the appropriate corrective action. The stoppage will continue until conditions have been corrected. Standby time and cost required for corrective action is at the Contractor's expense. The occurrence of the following events shall be reported in writing to IDOT and shall require the Contractor to automatically stop paint removal and initiate clean up activities.

- Break in containment barriers.
- Visible emissions in excess of the specification tolerances.
- Serious injury within the containment area.
- Fire or safety emergency
- Respiratory system failure
- Power failure

- b) Contingency Plans and Arrangements. The Engineer will refer to the contingency plan for site specific instructions in the case of emergencies.

The Contractor shall prepare a contingency plan for emergencies including fire, accident, failure of power, failure of supplied air system or any other event that may require modification of standard operating procedures during paint removal and painting processes. The plan shall include specific procedures to ensure safe egress and proper medical attention in the event of an emergency. The Contractor shall post the telephone numbers and locations of emergency services including fire, ambulance, doctor, hospital, police, power company and telephone company.

A two-way radio, or equal, as approved by the Engineer, capable of summoning emergency assistance shall be available at each bridge during the time the Contractor's personnel are

at the bridge site under this contract. The following emergency response equipment described in the contingency plan (generic form attached) shall be available during this time as well: an appropriate portable fire extinguisher, a 55 gal (208 L) drum, a 5 gal (19 L) pail, a long handled shovel, absorbent material (one bag).

A copy of the contingency plan shall be maintained at each bridge during cleaning operations and during the time the Contractor's personnel are at the bridge site under this contract. The Contractor shall designate the emergency coordinator(s) required who shall be responsible for the activities described.

An example of a contingency plan is included at the end of this Special Provision.

Collection, Temporary Storage, Transportation and Disposal of Waste.

All surface preparation/paint residues shall be collected daily and deposited in all-weather containers supplied by the Contractor as temporary storage. The storage area shall be secure to prevent unauthorized entry or tampering with the containers. Acceptable measures include storage within a fully enclosed (e.g., fenced in) and locked area, within a temporary building, or implementing other reasonable means to reduce the possibility of vandalism or exposure of the waste to the public or the environment (e.g., chains and locks to secure the covers of roll-off boxes). Waste shall not be stored outside of the containers.

No residues shall remain on uncontained surfaces overnight. Waste materials shall not be removed through floor drains or by throwing them over the side of the bridge. Flammable materials shall not be stored around or under any bridge structures.

The Contractor shall have each waste stream sampled for each project and tested by TCLP and according to EPA and disposal company requirements. The Engineer shall be notified in advance when the samples will be collected. The samples shall be collected and shipped for testing within the first week of the project, with the results due back to the Engineer within 10 days. Testing shall be considered included in the pay item for "Containment and Disposal of Non-Lead Paint Cleaning Residues." Copies of the test results shall be provided to the Engineer prior to shipping the waste. If the waste tests hazardous, the Contractor shall comply with all provision of "Collection, Temporary Storage, Transportation and Disposal of Waste" found in specification "Containment and Disposal of Lead Paint Cleaning Residues," except additional costs will be paid for according to Article 109.04.

If the waste is found to be non-hazardous as determined by TCLP testing, the waste shall be classified as a non-hazardous special waste, transported by a licensed waste transporter, and disposed of at an IEPA permitted disposal facility in Illinois.

The waste shall be shipped to the disposal facility within 90 days of the first accumulation of the waste in the containers. When permitted by the Engineer, waste from multiple bridges in the same contract may be transported by the Contractor to a central waste storage location(s) approved by the Engineer in order to consolidate the material for pick up, and to minimize the storage of waste containers at multiple remote sites after demobilization. Arrangements for the final waste pickup shall be made with the waste hauler by the time blast cleaning operations are completed or as required to meet the 90-day limit stated above.

All other project waste shall be removed from the site according to Federal, State and Local regulations, with all waste removed from the site prior to final Contractor demobilization.

The Contractor shall make arrangements to have other hazardous waste, which he/she generates, such as used paint solvent, transported to the Contractor's facility at the end of each day that this waste is generated. These hazardous wastes shall be manifested using the Contractor's own generator number to a treatment or disposal facility from the Contractor's facility. The Contractor shall not combine solvents or other wastes with cleaning residue wastes.

All waste streams shall be stored in separate containers.

The Contractor is responsible for the payment of any fines and undertaking any clean up activities mandated by State or federal environmental agencies for improper waste handling, storage, transportation, or disposal.

Basis of Payment. The containment, collection, temporary storage, transportation, testing and disposal of all project waste, and all other work described herein will be paid for at the contract lump sum price for CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES at the designated location. Payment will not be authorized until all requirements have been fulfilled as described in this specification, including the submittal of waste test results, and disposal of all waste.

Table 1 Containment Criteria for Removal of Paint and Other Debris¹					
Removal Method	SSPC Class²	Containment Material Flexibility	Containment Material Permeability³	Containment Support Structure	Containment Material Joints
Hand Tool Cleaning	None	See Note 4	See Note 4	See Note 4	See Note 4
Power Tool Cleaning w/ Vacuum	None	See Note 4	See Note 4	See Note 4	See Note 4
Power Tool Cleaning w/o Vacuum ⁵	3P	Rigid or Flexible	Permeable	Minimal	Partially Sealed
Water Jetting, Wet Abrasive Blast ⁶	4W	Flexible	Permeable	Flexible or Minimal	Partially Sealed
Water Cleaning ⁷	None	See Note 7	See Note 7	See Note 7	See Note 7
Open Abrasive Blast Cleanings ⁸	4A	Rigid or Flexible	Permeable	Minimal	Partially Sealed
Vacuum Blast Cleaning	None	See Note 4	See Note 4	See Note 4	See Note 4

Table 1 (Continued) Containment Criteria for Removal of Paint and Other Debris¹					
Removal Method	SSPC Class²	Containment Entryway	Ventilation System Required	Negative Pressure Required	Exhaust Filtration Required
Hand Tool Cleaning	None	See Note 4	See Note 4	See Note 4	See Note 4
Power Tool Cleaning w/ Vacuum	None	See Note 4	See Note 4	See Note 4	See Note 4
Power Tool Cleaning w/o Vacuum ³	3P	Open Seam	No	No	No
Water Jetting, Wet Abrasive Blast ⁴	4W	Open Seam	No	No	No
Water Cleaning ⁷	None	See Note 7	See Note 7	See Note 7	See Note 7
Open Abrasive Blast Cleaning ⁸	4A	Open Seam	No	No	No
Vacuum Blast Cleaning	None	See Note 4	See Note 4	See Note 4	See Note 4

Notes:

¹ This table provides general design criteria only. It does not guarantee that specific controls over emissions will occur because unique site conditions must be considered in the design. Other combinations of materials may provide controls over emissions equivalent to or greater than those combinations shown above.

² The SSPC Classification is based on SSPC Guide 6.

³ Permeability addresses both air and water as appropriate. In the case of water removal methods, the containment materials must be resistant to water. When ground covers are used they shall be of sufficient strength to withstand the impact and weight of the debris and the equipment used for collection and clean-up.

⁴ Containment is not required provided paint chips and debris are removed from the ground and surfaces in and around the worksite at the end of each day. Ground tarpaulins can be used to simplify the cleanup. At the Contractor's option, permeable containment materials may be suspended under the work area to capture the debris at the time of removal. Permeable materials for the purpose of this specification are defined as materials with openings measuring 25 mils or less in greatest dimension.

⁵This method involves open power tool cleaning. The containment consists of permeable materials suspended beneath the work area to capture debris. As an option, if the work is close to the ground or bridge deck, ground covers can be used to capture the paint chips and debris for proper disposal.

⁶This method involves water jetting (with and without abrasive) and wet abrasive blast cleaning where the goal is to remove paint. Permeable containment materials are used to capture removed paint chips, debris, and abrasives (in the case of wet abrasive blast cleaning) while allowing the water to pass through. Permeable materials for the purpose of this specification are defined as materials with openings measuring 25 mils (625 microns) or less in greatest dimension.

⁷Chips and debris can be removed from the ground at the end of each shift, or the Contractor can install a Class 4W containment in the work area to collect the debris while allowing the water to pass through (see note 6)

⁸This method involves dry abrasive blast cleaning. Containment is required to control emissions of dust and debris from escaping beyond the property line.

Containment Components - The basic components that make up containment systems are defined below. The components are combined in Table 1 to establish the minimum containment system requirements for the method(s) of paint removal specified for the Contract.

- 1 Rigidity of Containment Materials - Rigid containment materials consist of solid panels of plywood, aluminum, rigid metal, plastic, fiberglass, composites, or similar materials. Flexible materials consist of screens, tarps, drapes, plastic sheeting, or similar materials. When directed by the Engineer, do not use flexible materials for horizontal surfaces directly over traffic lanes or vertical surfaces in close proximity to traffic lanes. If the Engineer allows the use of flexible materials, the Contractor shall take special precautions to completely secure the materials to prevent any interference with traffic.
- 2 Permeability of Containment Materials - The containment materials are identified as air impenetrable if they are impervious to dust or wind such as provided by rigid panels, coated solid tarps, or plastic sheeting. Air penetrable materials are those that are formed or woven to allow air flow. Water impermeable materials are those that are capable of containing and controlling water when wet methods of preparation are used. Water permeable materials allow the water to pass through. Chemical resistant materials are those resistant to chemical and solvent stripping solutions. Use fire retardant materials in all cases.
- 3 Support Structure - Rigid support structures consist of scaffolding and framing to which the containment materials are affixed to minimize movement of the containment cocoon. Flexible support structures are comprised of cables, chains, or similar systems to which the containment materials are affixed. Use fire retardant materials in all cases.

- 4 Containment Joints - Fully sealed joints require that mating surfaces between the containment materials and to the structure being prepared are completely sealed. Sealing measures include tape, caulk, Velcro, clamps, or other similar material capable of forming a continuous, impenetrable or impermeable seal. When materials are overlapped, a minimum overlap of 8 in. (200 mm) is required.
- 5 Entryway - An airlock entryway involves a minimum of one stage that is fully sealed to the containment and which is maintained under negative pressure using the ventilation system of the containment. Resealable door entryways involve the use of flexible or rigid doors capable of being repeatedly opened and resealed. Sealing methods include the use of zippers, Velcro, clamps, or similar fasteners. Overlapping door tarpaulin entryways consist of two or three overlapping door tarpaulins.
- 6 Mechanical Ventilation - The requirement for mechanical ventilation is to ensure that adequate air movement is achieved to reduce worker exposure to toxic metals to as low as feasible according to OSHA regulations (e.g., 29 CFR 1926.62), and to enhance visibility. Natural ventilation does not require the use of mechanical equipment for moving dust and debris through the work area.
- 7 Negative Pressure - When specified, achieve a minimum of 0.03 in.(7.5 mm) water column (W.C.) relative to ambient conditions, or confirm through visual assessments for the concave appearance of the containment enclosure.
- 8 Exhaust Ventilation -When mechanical ventilation systems are specified,, provide filtration of the exhaust air, to achieve a filtration efficiency of 99.9 percent at 0.5 microns.

CONTINGENCY PLAN
FOR
NON-LEAD BASED PAINT REMOVAL PROJECTS

Bridge No.: _____

Location: _____

Note:

- 1 A copy of this plan must be kept at the bridge while the Contractor's employees are at the site.
- 2 A copy of the plan must be mailed to the police and fire departments and hospital identified herein.

Primary Emergency Coordinator

Name: _____

Address: _____

City: _____

Phone: (Work) _____

(Home) _____

Alternate Emergency Coordinator

Name: _____

Address: _____

City: _____

Phone: (Work) _____

(Home) _____

Emergency Response Agencies

POLICE:

- 1 State Police (if bridge not in city) Phone: _____
District No. _____
Address: _____
- 2. County Sheriff _____ Phone: _____
County: _____
Address: _____
- 3. City Police _____ Phone: _____
District No. _____
Address: _____

Arrangements made with police: arrangements): (Describe arrangements or refusal by police to make

FIRE:

- 1. City _____ Phone: _____
Name: _____
Address: _____
- 2. Fire District _____ Phone: _____
Name: _____
Address: _____

3. Other: _____ Phone: _____

Name: _____

Address: _____

Arrangements made with fire departments: (Describe arrangements or refusal by fire departments to make arrangements):

HOSPITAL:

Name: _____ Phone: _____

Address: _____

Arrangements made with hospital: (Describe arrangements or refusal by hospital to make arrangements):

Properties of waste and hazard to health:

Places where employees working:

Location of Bridge:

Types of injuries or illness which could result:

Appropriate response to release of waste to the soil:

Appropriate response to release of waste to surface water:

Emergency Equipment at Bridge

Emergency Equipment List	Location of Equipment	Description of Equipment	Capability of Equipment
1 Two-way radio	Truck		Communication
2 Portable Fire Extinguisher	Truck		Extinguishes Fire
3 Absorbent Material	Truck		Absorbs Paint or Solvent Spills
4 Hand Shovel	Truck		Scooping Material
5 208 L (55 Gallon) Drum	Truck		Storing Spilled Material
6 19 L (5 Gallon) Pail	Truck		Storing Spilled Material

Emergency Procedure

- 1 Notify personnel at the bridge of the emergency and implement emergency procedure.
- 2 Identify the character, source, amount and extent of released materials.
- 3 Assess possible hazards to health or environment.
- 4 Contain the released waste or extinguish fire. Contact the fire department if appropriate.
- 5 If human health or the environment is threatened, contact appropriate police and fire department. In addition, the Emergency Services and Disaster Agency needs to be called using their 24-hour toll free number (800-782-7860) and the National Response Center using their 24-hour toll free number (800-824-8802).
- 6 Notify the Engineer that an emergency has occurred.
- 7 Store spilled material and soil contaminated by spill, if any, in a drum or pail. Mark and label the drum or pail for disposal.
- 8 Write a full account of the spill or fire incident including date, time, volume, material, and response taken.
- 9 Replenish stock of absorbent material or other equipment used in response.

EQUIPMENT RENTAL RATES (BDE)

Effective: August 2, 2007

Revised: January 2, 2008

Replace the second and third paragraphs of Article 105.07(b)(4)a. of the Standard Specifications with the following:

“Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).”

Replace Article 109.04(b)(4) of the Standard Specifications with the following:

“(4) Equipment. Equipment used for extra work shall be authorized by the Engineer. The equipment shall be specifically described, be of suitable size and capacity for the work to be performed, and be in good operating condition. For such equipment, the Contractor will be paid as follows.

- a. Contractor Owned Equipment. Contractor owned equipment will be paid for by the hour using the applicable FHWA hourly rate from the “Equipment Watch Rental Rate Blue Book” (Blue Book) in effect when the force account work begins. The FHWA hourly rate is calculated as follows.

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

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

The time allowed will be the actual time the equipment is operating on the extra work. For the time required to move the equipment to and from the site of the extra work and any authorized idle (standby) time, payment will be made at the following hourly rate: $0.5 \times (\text{FHWA hourly rate} - \text{EOC})$.

All time allowed shall fall within the working hours authorized for the extra work.

The rates above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals. The rates do not include labor.

The Contractor shall submit to the Engineer sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper equipment category. If a rate is not established in the Blue Book for a particular piece of equipment, the Engineer will establish a rate for that piece of equipment that is consistent with its cost and use in the industry.

- b. Rented Equipment. Whenever it is necessary for the Contractor to rent equipment to perform extra work, the rental and transportation costs of the equipment plus five percent for overhead will be paid. In no case shall the rental rates exceed those of established distributors or equipment rental agencies.

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

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000

Revised: January 1, 2006

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section 7(b) of the State Prompt Payment Act. State law creates other and additional remedies

available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)

Effective: April 1, 2007

Revise the seventh paragraph of Article 1106.02 of the Standard Specifications to read:

“At the time of manufacturing, the retroreflective prismatic sheeting used on channelizing devices shall meet or exceed the initial minimum coefficient of retroreflection as specified in the following table. Measurements shall be conducted according to ASTM E 810, without averaging. Sheeting used on cones, drums and flexible delineators shall be reboundable as tested according to ASTM D 4956. Prestriped sheeting for rigid substrates on barricades shall be white and orange.

Initial Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material				
Observation Angle (deg.)	Entrance Angle (deg.)	White	Orange	Fluorescent Orange
0.2	-4	365	160	150
0.2	+30	175	80	70
0.5	-4	245	100	95
0.5	+30	100	50	40”

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

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

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

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

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.

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within **50** working days.

FIELD THERMAL SPRAYING (METALLIZING) STRUCTURAL STEEL

Effective January 28, 2005

Revised January 2, 2007

Description. This work shall consist of the surface preparation and application of a thermally sprayed metallic coating (metallizing) to designated surfaces using the metallizing system(s) specified on the plans, and the application of seal coats/topcoats when specified. The Contractor shall furnish all materials, equipment, labor, and other essentials necessary to accomplish this work and all other work described herein and as directed by the Engineer.

The requirements as outlined in the Society for Protective Coatings (SSPC) Standard, SSPC-CS-23.00/AWS C2.23M/Nace No. 12, Specification for the Application of Thermal Spray Coatings (Metallizing) of Aluminum, Zinc, and Their Alloys and Composites for the Corrosion Protection of Steel shall be followed and are considered as part of this specification. In the event of a conflict, the requirements of this specification prevail.

Contractor Prequalification. Unless indicated otherwise in the contract plans, at the time of bid, the Metallizing Contractor or Subcontractor shall maintain the following SSPC certifications:

- SSPC-QP1, Standard Procedure for Evaluating Painting Contractors (Field Application to Complex Structures).
- If lead paint is being removed, SSPC-QP2, Standard Procedure for Evaluating the Qualifications of Painting Contractors to Remove Hazardous Paint.
- The certification(s) shall remain current throughout the duration of the metallizing work under the contract.

The Metallizing Contractor or Subcontractor shall have satisfactorily performed a minimum of three (3) previous projects involving abrasive blast cleaning and thermal spray application of metals or alloys to steel substrates. At least one project within the past two (2) years shall involve a bridge or similar industrial type application. Prior to the pre-construction meeting, provide the Department a list of successfully completed projects, including names, addresses and telephone numbers.

Suitability of the Metallizing Contractor's or Subcontractor's qualifications and prior experience will be considered by the Department before granting approval to proceed.

Materials: All metallizing feedstock material to be used shall be produced by the same manufacturer and meet the thermal spray equipment manufacturer's specifications.

- a. The size of the feedstock material shall be the appropriate size as required by the equipment manufacturer.
- b. The wire used for metallizing shall be 85/15 zinc/aluminum per ASTM B-833, Standard Specification for Zinc Wire for Thermal Spraying (Metallizing). The manufacturer's certificate verifying the thermal spray coating (TSC) feedstock chemical composition, obtained from a representative sample of each heat during the pouring or subsequent processing, conforming to AWS C2.25, Specification for Solid and Composite Wires, and Ceramic Rods for Thermal Spraying, and all applicable Material Safety Data Sheets (MSDS) shall be provided to the Engineer prior to the start of work.

Submittals: The Contractor shall submit for Engineer review and acceptance, the following plans and information for completing the work. The submittals shall be provided within 30 days of execution of the contract unless given written permission by the Engineer to submit them at a later date. Work cannot proceed until the submittals are accepted by the Engineer. Details for each of the plans are presented within the body of this specification.

- a. Contractor/Personnel Qualifications. Evidence of Contractor experience and the names and qualifications/experience/training of the personnel managing and implementing the Quality Control program and conducting the quality control tests.
- b. Quality Control (QC) Program. The QC Program shall identify the following: the instrumentation that will be used, a schedule of required measurements and observations, procedures for correcting unacceptable work, and procedures for improving surface preparation and metallizing/coating quality as a result of quality control findings. The program shall incorporate at a minimum, the IDOT Quality Control Daily Report Forms as supplied by the Engineer.
- c. Inspection Access Plan. The inspection access plan shall address procedures for use by the contractor QC personnel for ongoing inspections and by the Engineer during Quality Assurance (QA) observations.
- d. Surface Preparation/Metallizing Plan. The surface preparation/metallizing plan shall include the methods of surface preparation and type of equipment to be utilized for abrasive blasting, wet abrasive blasting, removal of rust, mill scale, paint or foreign matter, and remediation of chlorides. If detergents, additives, or inhibitors are incorporated into the water (for wet abrasive blasting or chloride remediation), the Contractor shall include the names of the materials and Material Safety Data Sheets (MSDS). The Contractor shall also include a letter from the feedstock manufacturer stating any such detergent, additive, or inhibitor is compatible and will not adversely affect the metallizing system. The Contractor shall identify the solvents proposed for solvent cleaning together with the appropriate MSDS.

When seal coats/topcoats are specified the plan shall also include the methods of coating application, and equipment to be utilized.

If the Contractor proposes to heat or dehumidify the containment, the methods and equipment proposed for use shall be included in the Plan for the Engineer's consideration.

- e. Metallizing and Coatings. Provide proof that the metallizing feedstock complies with ASTM B-833 and AWS C2.25. If seal coats/topcoats are specified, provide product data sheets. Provide MSDS for all proposed materials.
- f. Abrasives. Abrasives to be used for abrasive blast cleaning shall include the appropriate MSDS. Abrasive shall be hard and sharp in order to produce an angular surface profile. Acceptable abrasives include but are not limited to, angular aluminum oxide, angular steel grit and angular crushed slag. Silica sand shall not be used. Steel shot and other abrasives producing a rounded surface profile are not acceptable.

A sample of the abrasive shall be submitted to the Engineer two weeks prior to surface preparation for testing and acceptance.

For expendable abrasives, the Contractor shall provide certification from the abrasive supplier that the abrasive meets the requirements of SSPC-AB1, Mineral and Slag Abrasives. For steel grit abrasives, the certification shall indicate that the abrasive meets the requirements of SSPC-AB3, Newly Manufactured or Re-Manufactured Steel Abrasives

- g. Protective Coverings. Plan for containing or controlling metallizing/paint debris (droplets, overspray, etc.). Any tarpaulins or protective coverings proposed for use shall be fire retardant. For submittal requirements involving the containment used to remove lead paint, the Contractor shall refer to Special Provision for Containment and Disposal of Lead Paint Cleaning Residues.
- h. Progress Schedule. Progress schedule shall be submitted per Article 108.02 and shall identify all major work items (e.g., installation of rigging/containment, surface preparation, and metallizing application).

When the Engineer accepts the submittals, the Contractor will receive written notification. The Contractor shall not begin any paint removal work until the Engineer has accepted the submittals. The Contractor shall not construe Engineer acceptance of the submittals to imply approval of any particular method or sequence for conducting the work, or for addressing health and safety concerns. Acceptance of the programs does not relieve the Contractor from the responsibility to conduct the work according to the requirements of Federal, State, or Local regulations and this specification, or to adequately protect the health and safety of all workers involved in the project and any members of the public who may be affected by the project. The Contractor remains solely responsible for the adequacy and completeness of the programs and work practices, and adherence to them.

Quality Control (QC) Inspections. The Contractor shall perform first line, in process QC inspections. The Contractor shall implement the submitted and accepted QC Program to insure that the work accomplished complies with these specifications. The designated Quality Control inspector shall be onsite full time during any operations that affect the quality of the coating system (e.g., surface preparation and chloride remediation, metalizing application, application of coatings when specified, and evaluation of the finished system upon project completion). The Contractor shall use the IDOT Quality Control Daily Report forms supplied by the Engineer to record the results of quality control tests. The completed reports shall be turned into the Engineer before work resumes the following day.

Contractor QC inspections shall include, but not be limited to the following:

- Suitability of protective coverings and the means employed to control project debris, etc.
- Ambient conditions;
- Surface preparation (solvent cleaning, abrasive blast cleaning, and etc.);
- Chloride remediation;
- Thermal Spray application (specified materials, and adhesion/dry film thickness);
- Coating (when specified) continuity and coverage (freedom from overspray, dry spray build-up, pinholes, skips, misses, etc.).

The personnel managing the Contractor's QC Program shall possess a minimum classification as a National Association of Corrosion Engineers (NACE) CIP Level 2, or shall provide evidence of successful inspection of three projects of similar or greater complexity and scope that have been completed in the last two years. References shall include the name, address, and telephone number of a contact person employed by the bridge owner.

The personnel performing the QC tests shall be trained in surface preparation and coatings inspection, thermal spray application and the use of the testing instruments. Documentation of training shall be provided. The QC personnel shall not perform hands on surface preparation or metalizing/coating activities. Applicators shall perform dry film thickness measurements, with QC personnel conducting random spot checks. The Contractor shall not replace the QC personnel assigned to the project without advance notice to the Engineer, and acceptance of the replacement(s), by the Engineer.

The Contractor shall supply all necessary equipment to perform the QC inspections. Equipment shall include the following at a minimum:

- Psychrometer or comparable equipment for the measurement of dew point and relative humidity, together with all necessary weather bureau tables or psychrometric charts.
- Surface temperature thermometer.
- Hypodermic Needle Pressure Gage for determining blasting pressure at the nozzle.
- SSPC Visual Standards VIS 1, Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning and/or VIS 5, Guide and Reference Photographs for Steel Prepared by Wet Abrasive Blast Cleaning.
- Testex Press-O-Film Replica Tape and Spring Micrometer.
- Bresle Cell Kits or CHLOR*TEST kits for chloride determinations, or equivalent.
- Blotter paper for compressed air cleanliness checks.

- Type 2 Electronic Dry Film Thickness Gage per SSPC-PA2, Measurement of Dry Coating Thickness with Magnetic Gages
- Calibration standards for dry film thickness gage.
- Light meter for measuring light intensity during paint removal, metallizing, and inspection activities.
- All applicable ASTM, ANSI, AWS, and SSPC Standards used for the work (reference list attached).

The instruments shall be calibrated by the Contractor's personnel according to the equipment manufacturer's recommendations and the Contractor's QC Program. All inspection equipment shall be made available to the Engineer for QA observations on an as needed basis.

Hold Point Notification: Specific inspection items throughout this specification are designated as Hold Points. Unless other arrangements are made at the project site, the Contractor shall provide the Engineer with a minimum four-hour notification before a Hold Point inspection will be reached. If the four-hour notification is provided and the work is ready for inspection at that time, the Engineer will conduct the necessary observations. If the work is not ready at the appointed time, unless other arrangements are made, an additional four-hour notification is required. Permission to proceed beyond a Hold Point without a QA inspection will be granted solely at the discretion of the Engineer, and only on a case-by-case basis.

Quality Assurance (QA) Observations: The Engineer will conduct QA observations of any or all phases of the work. The presence or activity of Engineer observations in no way relieves the Contractor of the responsibility to provide all necessary daily QC inspections of his/her own and to comply with all requirements of this Specification.

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

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

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

When the surface to be inspected is more than 6 ft (1.8 m) above the ground and fall protection is not provided (i.e., guardrails are not provided), the Contractor shall provide the Engineer with a safety harness and a lifeline according to OSHA regulations. The lifeline and attachment shall not direct the fall into oncoming traffic. The Contractor shall provide a method of attaching the lifeline to the structure independent of the inspection facility or any support of the platform.

When the inspection facility (e.g., platform) is more than 2 1/2 ft (800 mm) above the ground, the Contractor shall provide an approved means of access onto the platform.

When the work is above water, the Contractor shall supply life jackets if fall protection is not provided (e.g., if the platform does not include guard rails).

When working over water, the Contractor shall provide a safety boat according to OSHA regulations.

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

Surface Preparation and Metallizing/Painting Equipment: The metallizing unit shall be a gun manufactured by an established domestic company. Either arc or flame spray type equipment are acceptable. The equipment shall be used according to manufacturer's recommendations.

All cleaning and metallizing/painting equipment shall include gages capable of accurately measuring fluid and air pressures and shall have valves capable of regulating the flow of air, water, current or feedstock as recommended by the equipment manufacturer. The equipment shall be maintained in proper working order and be of size or capacity to satisfactorily complete the work.

Surface preparation and metallizing/painting equipment shall utilize filters, traps or separators recommended by the manufacturer of the equipment and shall be kept clean to prevent oil, water, dried paint and other foreign materials from being deposited on the surface. The filters, traps and separators shall be cleaned or drained by means, and at intervals, recommended by the manufacturer of the equipment.

Diesel or gasoline powered equipment shall be positioned or vented in a manner to prevent deposition of combustion contaminants on any part of the structure.

Test Sections: Prior to surface preparation, the Contractor shall prepare a test section(s) on each structure to be painted in a location(s) which the Engineer considers to be representative of the existing surface condition and steel type for the structure as a whole. More than one test section may be needed to represent the various design configurations of the structure. The purpose of the test section(s) is to demonstrate the degree of cleaning required (cleanliness and profile). Each test section shall be approximately 10 sq ft (0.93 sq m). The test section(s) shall be prepared using the same equipment, materials and procedures as the production operations. The Contractor shall prepare the test section(s) to the specified level of cleaning according to the appropriate SSPC visual standards, modified as necessary to comply with the requirements of this specification. The written requirements of the specification prevail in the event of a conflict with the SSPC visual standards.

The test sections shall be metallized after preparation. The thickness shall be measured with an electronic dry film thickness gage, for acceptance by the Engineer together with visual inspection of the continuity and texture of the sprayed metal.

The Engineer will perform cut tests and adhesion tests according to SSPC-CS 23.00/AWS C2.23/NACE No. 12 to determine the acceptability of the application.

Cut Test - A hammer and chisel will be used to impact the surface at a shallow angle. Enough force will be used to penetrate the metallizing without severely cutting into the substrate. Each cut will be a minimum of 1.5 inches (38 mm) long. If any part of the metallizing lifts from the surface, the test area is unacceptable.

Adhesion Tests – A self adjusting adhesion tester will be used according to ASTM D 4541, Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers. A minimum of 3 tests will be conducted in each test area. If any of the tests shows the metallizing to exhibit less than 700psi (4.83 MPa), the test area is unacceptable.

Only after the test section(s) have been approved shall the Contractor proceed with surface preparation operations. Additional compensation will not be allowed the Contractor for preparation of the test section(s).

Protective Coverings and Damage: All portions of the structure that could be damaged by the surface preparation and metallizing/painting operations (e.g., utilities), including any sound paint that is allowed to remain according to the contract documents, shall be protected by covering or shielding. Tarpaulins drop cloths, or other approved materials shall be employed. The Contractor shall comply with the provisions of the Illinois Environmental Protection Act. Metallizing/paint overspray are not permitted to escape into the air or onto any other surfaces or surrounding property not intended to be metallized or painted. Containment shall be used to control metallizing/paint drips, spills, and overspray, and shall be dropped and all equipment secured when sustained wind speeds of 40 mph (64 kph) or greater occur, unless the containment design necessitates action at lower wind speeds. The Contractor shall evaluate project-specific conditions to determine the specific type and extent of containment needed to control emissions and shall submit a plan for containing or controlling metallizing/paint debris (spills, overspray, etc.) to the Engineer for approval prior to starting the work. Approval shall not relieve the Contractor of the ultimate responsibility for controlling debris from escaping the work zone.

When the protective coverings need to be attached to the structure, they shall be attached by bolting, clamping, or similar means. Welding or drilling into the structure is prohibited unless approved by the Engineer in writing. When removing coatings containing lead the containment and disposal of the residues shall be as specified in the Special Provision for Containment and Disposal of Lead Paint Cleaning Residues contained elsewhere in this Contract. When removing coatings not containing lead the containment and disposal of the residues shall be as specified in the Special Provision for Containment and Disposal of Non-Lead Paint Cleaning Residues contained elsewhere in this Contract.

The Contractor shall be responsible for any damage caused to persons, vehicles, or property, except as indemnified by the Response Action Contractor Indemnification Act. Whenever the intended purposes of the controls or protective devices used by the Contractor are not being

accomplished, as determined by the Engineer, work shall be immediately suspended until corrections are made. Damage to vehicles or property shall be repaired by the Contractor at the Contractor's expense. Metallized/painted surfaces damaged by any Contractor's operation shall be repaired, removed and/or remetalized/painted, as directed by the Engineer, at the Contractor's expense.

Weather Conditions: The surfaces to be metalized after surface preparation must remain free of moisture and other contaminants. The Contractor shall control his/her operations to insure that dust, dirt or moisture do not come in contact with surfaces prepared that day. In addition to the metalizing manufacturer's written instructions for surface preparation and metalizing, the following conditions shall apply. The conditions also apply when painting is specified. (When in conflict, the most restrictive conditions shall govern).

- a. The minimum steel and air temperatures shall be 40°F (4°C). Metalizing or paint shall not be applied to steel which is at a temperature that will cause blistering, porosity or otherwise detrimental to the life of the metalizing or the coating. Metalizing or coatings shall not be applied in rain, wind, snow, fog or mist, or when the steel surface temperature is less than 5°F (3°C) above the dew point. Metalizing or coatings shall not be applied to wet, damp or frosted surfaces. Metalizing or coatings shall not be applied when the relative humidity is above 85 percent.
- b. If the Contractor proposes to control the weather conditions inside containment, proposed methods and equipment for heating and/or dehumidification shall be included in the work plans for the Engineer's consideration. Any heating/dehumidification proposals accepted by the Engineer shall be implemented at no additional cost to the Department.
- c. The Contractor shall monitor temperature, dew point, and relative humidity every four hours during surface preparation, metalizing, and coating application in the specific areas where the work is being performed. The frequency of monitoring shall increase if weather conditions are changing. The Engineer has the right to reject any work that was performed under unfavorable weather conditions. Rejected work shall be removed, re-cleaned, and metalized/painted at the Contractor's expense.

These conditions will be verified by the Engineer at locations representative of the surfaces to be cleaned, and metalized/painted. Work accomplished under unfavorable weather conditions will be considered unacceptable and complete re-cleaning and metalizing/painting of these areas will be required at the Contractor's expense.

Compressed Air Cleanliness: Prior to using compressed air for abrasive blast cleaning, blowing down the surfaces, and metalizing or coating application, the Contractor shall verify that the compressed air is free of moisture and oil contamination according to the requirements of ASTM D 4285, Standard Test Method for Indicating Oil or Water in Compressed Air. The tests shall be conducted at least one time each shift for each compressor system in operation. If air contamination is evident, the Contractor shall change filters, clean traps, add moisture separators or filters, or make other adjustments as necessary to achieve clean, dry air. The Contractor shall also examine the work performed since the last acceptable test for evidence of defects or contamination caused by the compressed air. Effected work shall be repaired at the Contractor's expense.

Solvent Cleaning (HOLD POINT): The Contractor shall notify the Engineer 24-hours in advance of beginning surface preparation operations.

All traces of asphaltic cement, oil, grease, diesel fuel deposits, and other soluble contaminants on the steel surfaces to be metalized shall be removed by solvent cleaning according to SSPC-SP1, Solvent Cleaning, supplemented with scraping (e.g., to remove large deposits of asphaltic cement) as required. The Contractor shall identify the proposed solvent(s) in the submittals. The name and composition of replacement solvents, together with MSDS, shall be submitted for Engineer acceptance prior to use.

Under no circumstances shall abrasive blast cleaning or wet abrasive blasting be performed in areas containing surface contaminants or in areas where the Engineer has not accepted the solvent cleaning. Rejected surfaces shall be re-cleaned with both solvent and the specified mechanical means at the Contractor's expense.

Prior to mechanical cleaning, oil, grease, and other soluble contaminants on bare steel or rusted surfaces shall be removed by solvent cleaning according to SSPC-SP1.

Laminar and Stratified Rust: All laminar and stratified rust that has formed on the existing steel surfaces shall be removed. Pack rust formed along the perimeter of mating surfaces of connected plates or shapes of structural steel shall be removed to the extent feasible without mechanically detaching the mating surface. Any pack rust remaining after cleaning the mating surfaces shall be tight and intact when examined using a dull putty knife. The tools used to remove these corrosion products shall be identified in the submittals and accepted by the Engineer. If the surface preparation or removal of rust results in nicks or gouges, the work shall be suspended, and the damaged areas repaired to the satisfaction of the Engineer, at the Contractor's expense. The Contractor shall also demonstrate that he/she has made the necessary adjustments to prevent a reoccurrence of the damage prior to resuming work.

Surface Preparation (HOLD POINT): In each case, as part of the surface preparation process, soluble salts shall be remediated as specified under "Soluble Salt Remediation." The Contractor shall also note that the surface of the steel beneath the existing coating system may contain corrosion and/or mill scale. Removal of said corrosion and/or mill scale, when specified, shall be considered included in this work and no extra compensation will be allowed. One or more of the following methods of surface preparation shall be used as specified on the plans. When a method of surface preparation is specified, it applies to the entire surface, including areas that may be concealed by the containment connection points.

- a. **Limited Access Areas:** A best effort with the specified methods of cleaning shall be performed in limited access areas such as the backsides of rivets inside built up box members. The equipment being used for the majority of the cleaning may need to be supplemented with other commercially available equipment, such as angle nozzles, to properly clean the limited access areas. The acceptability of the best effort cleaning in these areas is at the sole discretion of the Engineer.
- b. **Flame Cut Steel:** The surface of flame-hardened steel shall be removed by grinding to the extent necessary to achieve the specified profile during subsequent abrasive blast cleaning.

- c. Near White Metal Blast Cleaning: This surface preparation shall be accomplished according to the requirements of Near White Metal Blast Cleaning SSPC-SP 10. The designated surfaces shall be prepared by dry abrasive blast cleaning or wet abrasive blast cleaning. A Near White Metal Blast Cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter, except for staining.

Random staining shall be limited to no more than five (5) percent of each 9 sq in (58 sq cm) of surface area and may consist of light shadows, slight streaks, or minor discoloration caused by stains of rust, stains of mill scale, or stains of previously applied paint. Surface discoloration is considered to be a residue that must be removed, rather than a stain, if it possesses enough mass or thickness that it can be removed as a powder or in chips when scraped with a pocketknife.

A surface profile shall be created on the steel as defined later under "Surface Profile."

If hackles or slivers are visible on the steel surface after cleaning, the Contractor shall remove them by grinding followed by re-blast cleaning.

If the surfaces are prepared using wet abrasive methods, attention shall be paid to tightly configured areas to assure that the preparation is thorough. After surface preparation is completed, the surfaces, surrounding steel, and containment materials/scaffolding shall be rinsed to remove abrasive dust and debris. Potable water shall be used for all operations. An inhibitor may be added to the supply water and/or rinse water to prevent flash rusting. If a rust inhibitor is proposed, the Contractor shall provide a sample of the proposed inhibitor together with a letter from the metallizing supplier indicating that the inhibitor is suitable for use with their product. The surfaces shall be allowed to completely dry before the application of any metallizing.

If the surface is degraded or contaminated subsequent to surface preparation and prior to metallizing, the surface shall be reblasted before metallizing. All surface cleaning shall be approved by the Engineer prior to metallizing.

Abrasives: Abrasive blast cleaning shall be performed using either expendable abrasives (other than silica sand) or recyclable steel grit abrasives. Expendable abrasives shall be used one time and disposed of. The abrasive shall be angular, and the abrasive suppliers shall certify that the expendable abrasives meet the requirements of SSPC-AB1 and that recyclable steel grit abrasives meet AB3. On a daily basis, the Contractor shall verify that recycled abrasives are free of oil contamination by conducting oil content tests according to SSPC-AB2 Specification for Cleanliness of Recycled Ferrous Metallic Abrasives.

All surfaces prepared with abrasives not meeting the SSPC-AB1, AB2, or AB3 requirements, as applicable, shall be solvent cleaned or low pressure water cleaned as directed by the Engineer, and re-blast cleaned at the Contractor's expense.

Abrasive suppliers shall certify that abrasives are not oil contaminated and shall have a water extract pH value within the range of six to eight. All surfaces prepared with abrasives which are

oil contaminated or have a pH outside the specified range shall be cleaned with solvent cleaner or low pressure water as directed by the Engineer and re-blasted by the Contractor at his/her expense.

Surface Profile (HOLD POINT): The abrasives used for blast cleaning shall have a gradation such that the abrasive will produce a uniform angular surface profile of 3.5 to 4.5 mils (89 to 114 microns). If the profile requirements for the selected metalizing wire are more restrictive, advise the Engineer and comply with the more restrictive requirements. For recycled abrasives, an appropriate operating mix shall be maintained in order to control the profile within these limits.

The average surface profile produced by the Contractor's surface preparation procedures will be determined at the beginning of the work and as required by the Engineer using a profile depth tape and micrometer. Profile depth tape measurements shall be retained and included with QA documents. Single measurements less than 3.5 mils (89 microns), or as determined by the Engineer, will be considered unacceptable. Areas having unacceptable measurements will be further tested to determine the limits of the deficient area. If unacceptable profiles are provided, work will be suspended. The Contractor shall submit a plan for the necessary adjustments to insure the correct surface profile on all surfaces. The Contractor shall not resume work until the new profile is verified by the QA observations, and the Engineer confirms, in writing, that the profile is acceptable.

Soluble Salt Remediation (HOLD POINT): The Contractor shall implement surface preparation procedures and processes that will remove chloride from the surfaces. Surfaces that may be contaminated with chloride include, but are not limited to, expansion joints and all areas that are subject to roadway splash or run off such as fascia beams and stringers.

Methods of chloride removal may include, but are not limited to, steam cleaning or pressure washing with or without the addition of a chemical soluble salt remover as approved by the feedstock manufacturer, and scrubbing before or after initial paint removal. The Contractor may also elect to clean the steel and allow it to rust overnight followed by re-cleaning, or by utilizing blends of fine and coarse abrasives during blast cleaning, wet abrasive methods of preparation, or combinations of the above. If steam or water cleaning methods of chloride removal are utilized over surfaces where the coating has been completely removed, and the water does not contact any lead containing coatings, the water does not have to be collected. The Contractor shall provide the proposed procedures for chloride remediation in the Surface Preparation/Painting Plan.

Upon completion of the chloride remediation steps, the Contractor shall use cell methods of field chloride extraction and test procedures (e.g., silver dichromate) according to SSPC Guide 15 and accepted by the Engineer, to test representative surfaces that were previously rusted (e.g., pitted steel) for the presence of remaining chlorides. Remaining chloride levels shall be no greater than 7 μ g/sq cm as read directly from the surface without any multiplier applied to the results. The testing must be performed, and the results must be acceptable, prior to painting each day.

A minimum of five tests per 1,000 sq ft (93 sq m) or fraction thereof completed in a given day, shall be conducted at project start-up. If results greater than 7 μ g/sq cm are detected, the surfaces shall be re-cleaned and retested at the same frequency. If acceptable results are

achieved on three consecutive days in which testing is conducted, the test frequency may be reduced to one test per 1,000 sq ft (93 sq m) prepared each day provided the chloride remediation process remains unchanged. If unacceptable results are encountered, or the methods of chloride remediation are changed, the Contractor shall resume testing at a frequency of five tests per 1,000 sq ft (93 sq m).

Following successful chloride testing, the chloride test areas shall be cleaned to the requirements of Near White Metal Blast Cleaning SSPC-SP 10.

Surface Condition Prior to Metallizing (HOLD POINT): Prepared surfaces, shall meet the requirements of SSPC SP-10 immediately prior to metallizing, and shall be metallized within six hours of blast cleaning. If rust appears or bare steel has been exposed for more than six hours prior to metallizing, the affected area shall be prepared again at the expense of the Contractor.

All static dust, loose paint and surface preparation cleaning residue on bridge steel surfaces, scaffolding and platforms, containment materials, and tops of abutments and pier caps shall be removed prior to metallizing. When lead paint is being disturbed, cleaning shall be accomplished by HEPA vacuuming unless it is conducted within a containment that is designed with a ventilation system capable of collecting the airborne dust and debris created by sweeping and blowing with compressed air.

The quality of surface preparation and cleaning of surface dust and debris must be accepted by the Engineer prior to metallizing.

The Engineer has the right to reject any work that was performed without adequate provision for QA observations to accept the degree of cleaning. Rejected metallizing work shall be removed and replaced at the Contractor's expense.

Daily Metallizing Operator/Equipment Qualification – Bend Tests: Unless directed otherwise by the Engineer, prior to the application of metallizing each day, each applicator shall apply metallizing to test panels for evaluation. If the test results do not meet the criteria established below, adjustments to the equipment or operator technique shall be made until acceptable results are achieved. If acceptable results are not achieved, the applicator(s) are not permitted to apply metallizing. The Contractor shall provide all materials and testing equipment necessary for the testing.

Each metallizing operator shall coat 5 bend test coupons prior to application each day. The coupons shall be of carbon steel and be prepared to Near White Blast Cleaning SSPC SP-10. The coupon dimensions shall be 2 X 8 X 0.050 in. (50 X 200 X 1.3mm). The coupons shall be sprayed to the same thickness and spray requirements as stipulated in this Specification. The coupons shall be bent around a 0.50 in (13mm) diameter mandrel. The application fails if the metallizing lifts from the substrate along the bend radius on any of the coupons. Cracks that can not be lifted from the substrate using a knife are acceptable.

Application of Metallizing: No surface shall be sprayed which shows any sign of rust, scale or moisture. If flame spraying is used, the substrate shall be preheated to approximately 250°F (120°C) to minimize condensation of moisture in the flame on to the substrate.

Spraying shall be done in overlapping passes in a cross-hatch pattern (i.e., a second set of overlapping passes shall be applied at right angles to the first set of overlapping passes) to ensure uniform coverage. The gun shall be held at such a distance from the work surfaces that the metal is still plastic on impact. The coating shall be firmly adherent and free from uncoated spots, lumps or blisters, and have a fine sprayed texture.

To the maximum extent practicable, metalizing shall be applied as a continuous film of uniform thickness free of pores. All thin spots or areas missed in the application shall be re-metalized.

The Contractor may apply a light preservation coat of metalizing (thick enough to sufficiently cover the profile peaks) in order to preserve the cleaned steel if conditions prevent the correct application thickness. The Contractor shall add the correct thickness as soon as possible to those areas but in not longer than 8 hours. The preservation coat shall be free of dirt, dust, oxidized coating and any other deformities as determined by the Engineer prior to application of additional metalizing.

Metallizing Thickness: The thickness of the metalizing shall be 10 - 12 mils (250-300 microns) measured as specified by SSPC-PA2 (Type 2 Electronic Gauge only).

Metallizing Adhesion: Adhesion testing of metalizing applied each day shall be determined with a self adjusting adhesion tester according to ASTM D 4541, Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers. Unless otherwise directed by the Engineer, a minimum of one test shall be conducted for every 500 sq ft (46.45 sq m) of metalized surface. If the metalizing will be seal coated, the tests shall be conducted prior to coating application. If any of the tests shows the metalizing to exhibit less than 700psi (4.83 MPa), additional tests shall be conducted to determine the extent of the deficient material. All deficient material shall be removed and replaced at no cost to the Department.

At the discretion of the Engineer, a blast cleaned test panel can be metalized at the same time each 500 sq ft (46.45 sq m) of surface, or portion thereof, is metalized. The adhesion testing can be performed on the companion panel rather than on the structure. If the adhesion tests on the panel fail, tests shall be conducted on the structure. If the adhesion tests on the panel are acceptable, the metalizing on the structure is considered to be acceptable and testing on the structure is not required.

Application of Seal Coat/Topcoat: When a seal coat is specified, the seal coat shall be applied within 8 hours of metalizing. The metalizing shall be dry and free of any visible debris or oxidation at the time of application. Apply the seal coat in accordance with the coating manufacturer's instructions at a coverage rate designed to achieve a theoretical dry film thickness of 1.5 mils (38 microns) if applied to a smooth surface (see Table 1). The intent of the seal coat is to saturate and cover the surface rather than to build a given film thickness.

The seal coat shall be applied in such a manner to assure thorough wetting and sealing of the metalizing and to achieve a smooth, streamline appearance free of dryspray, overspray, and orange peel. Shadow-through, pinholes, bubbles, skips, misses, lap marks between applications, runs, sags, or other visible discontinuities are unacceptable.

The topcoat shall be applied after the seal coat has dried according to the manufacturer's instructions, but as soon as possible to minimize the length of time that the coating is exposed to dust and other contamination. If the manufacturer's specified recoat times are exceeded, remove and replace the seal coat at no cost to the Department. The same restrictions regarding film appearance and continuity for the seal coat apply to the topcoat.

All coatings shall be applied by spray, supplemented with brush. Special attention shall be paid to obtaining complete coverage and proper coating thickness in crevices, on welds and edges, and in hard to reach areas and irregular surfaces such as back-to-back angles.

All coats shall be well adherent. Lifting coating shall be removed to adjacent, sound material and replaced.

TABLE 1
Seal Coats/Topcoats for Metallizing

<i>MFG/SURF PREP</i>	<i>SEAL COAT/DFT</i>	<i>TOP COAT/DFT</i>
Carboline Company	Carbothane Clear Gloss	Carbothane 134HG
Pittsburgh Paints (PPG)	UC 65371 Aluminum Moisture Cure Urethane	Pitthane High Build Semi-Gloss Urethane Enamel 2.0 to 3.0 mils (51 to 76 microns)
Sherwin-Williams	ArmorSeal Rexthane I MCU	Hi-Solid Polyurethane B65 300/B60V30 2.0 to 3.0 mils (51 to 76 microns)

Repair of Damage to New System and Areas Concealed by Containment: The Contractor shall repair all damage to the newly installed metallizing/coating system and areas concealed by the containment/protective covering attachment points, at no cost to the Department. If the damage extends to the substrate, the damaged areas shall be prepared to Near White Metal Blast Cleaning SSPC-SP 10 and the metallizing feathered for 2.0 to 3.0 in. (50 to 75 mm).

Special Instructions:

- a. At the completion of the work, the Contractor shall stencil in contrasting color paint, the date of metallizing the bridge. The letters shall be capitals, not less than 2 inches (50 mm) and not more than 3 inches (75 mm) in height.

The stencil shall contain the following words on three lines: "METALLIZED BY" on the first line, name of the contractor on the second line, and the month and year in which the coating was completed on the third line. This shall be stenciled on the outside face of an outside stringer near one end of the bridge, or at some equally visible surface near the end of the bridge, as designated by the Engineer.

- b. Removal of all debris, rust and waste generated by this work from the job site is the Contractor's responsibility and included in the Lump Sum Price.

It is understood and agreed that the cost of all work outlined above, unless otherwise specified, has been included in the bid, and no extra compensation will be allowed.

Basis of Payment:

This work shall be paid for at the contract Lump Sum price for Field Thermal Spraying (Metalizing) Structural Steel, and shall include all work specified herein.

Appendix 1 – Reference List

The Contractor shall maintain the following regulations and references on site for the duration of the project:

- Illinois Environmental Protection Act
- ASTM D 4285, Standard Test Method for Indicating Oil or Water in Compressed Air
- SSPC-AB 1, Mineral and Slag Abrasives
- SSPC-AB 2, Specification for Cleanliness of Recycled Ferrous Metallic Abrasives
- SSPC-AB 3, Newly Manufactured or Re-Manufactured Steel Abrasives
- SSPC-PA 2, Measurement of Dry Coating Thickness with Magnetic Gages
- SSPC-QP 1, Standard Procedure for Evaluating Painting Contractors (Field Application to Complex Structures)
- SSPC-QP 2, Standard Procedure for Evaluating the Qualifications of Painting Contractors to Remove Hazardous Paint
- SSPC-SP 1, Solvent Cleaning
- SSPC-SP 10/NACE No. 2, Near White Metal Blast Cleaning
- SSPC-SP 12/NACE No. 5, Surface Preparation and Cleaning of Metals by Water Jetting Prior to Recoating
- SSPC-VIS 1, Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning
- SSPC-VIS 5, Guide and Reference Photographs for Steel Prepared by Wet Abrasive Blast Cleaning
- SSPC – Guide 15, Field Methods for Retrieval and Analysis of Soluble Salts on Steel and Other Nonporous Surfaces

CS-23.00/AWS C2.23M/Nace No. 12, Specification for the Application of Thermal Spray Coatings (Metallizing) of Aluminum, Zinc, and Their Alloys and Composites for the Corrosion Protection of Steel

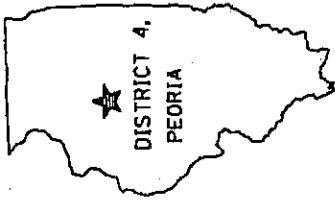
- AWS C2.25, Specification for Solid and Composite Wires, and Ceramic Rods for Thermal Spraying
- ASTM B833, Standard Specifications for Zinc Wire for Thermal Spraying (Metallizing)
- ASTM D4541, Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
- The metallizing feedstock and coating manufacturer's application instructions, MSDS and product data sheets

CHANGEABLE MESSAGE SIGN

The work shall be performed in accordance with Article 701.15(j) of the Standard Specifications.

Revise Article 701.20(h), paragraph two to read:

Furnishing, placing, and maintaining of each portable message sign shall be paid for at the contract unit price per calendar day of changeable message sign. Any portion of one calendar day during which the sign is operated as directed by the Engineer shall be paid for as one full calendar day.



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
**PROPOSED
 HIGHWAY PLANS**
 ROUTES: FAI - 155
 SECTION: D4 BRIDGE METALIZING 2008
 COUNTY: TAZEWELL
 C-94-057-07

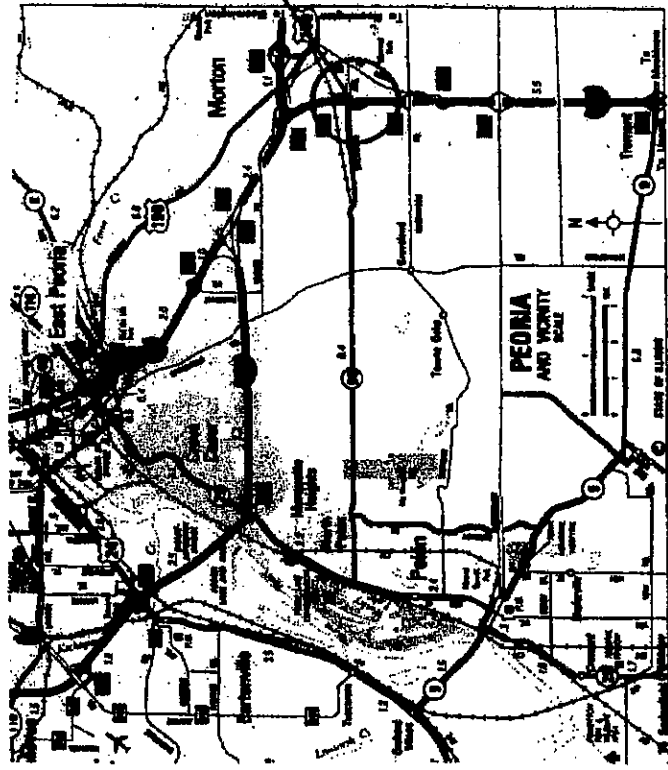
- INDEX OF SHEETS**
- 1) COVER SHEET
 - 2) COMMITMENT SHEET/GENERAL NOTES
 - 3A-D) SUMMARY OF QUANTITIES
 - 5) ELEVATION & PLAN
 - 6) FRAMING PLAN
 - 7) JOINT DETAIL
 - 8A-B) PLAN SHEET - 0128
 - 10&11) PLAN SHEET - 0129

TRAFFIC STANDARDS

- 781101-01
- 781106-01
- 781488-02
- 781482-06
- 781428-02
- 781901
- 784801-04
- 781061-02

AUT
 I-155 21,000 TOTAL 3000 TRUCKS
CONTRACT NO. 68708
CATALOG NO. 033500-00D

J.U.L.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-592-9123



888-0128 &
 888-0129

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED *M. R. ...* 20 08
 DISTRICT ENGINEER

ENGINEER OF DESIGN AND ENVIRONMENT
 _____ 20 _____
 DIRECTOR, DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS

COMMITMENTS

Commitments are not to be altered without the written approval of all parties to which the commitment was made.

No commitments have been made for this project.

GENERAL NOTES

Cleaning and metalizing of the existing structural steel shall be as specified in the special provision for "Field Thermal Spraying (Metalizing) Structural Steel". All beams, bearings and other structural steel 5 ft. from abutments shall be cleaned per Near White Blast Cleaning- SSPC-SP10 Structural Steel".

The designated areas cleaned per Near White Blast Cleaning- SSPC-SP10 shall be metalized according to the requirements of the special provision for "Field Thermal Spraying (Metalizing) Structural Steel".

All Metalized steel shall be sealed with an IDOT Approved Sealer applied @ a DFT of 1 to 2 mils. The outside fascias shall receive A polyurethane topcoat to match the existing fascia color - Interstate Green Munsell No. 7.5G 4/8. All paint shall be from an IDOT approved supplier.

The Metalizing Contractor's Prequalifications and Metalizing Applicator's requirements are not required to be met for this project. A technical representative from the metalizing equipment manufacture shall be onsite and readily available for technical guidance and consultation for the first three days of metalizing production. If the metalizing's performance passes all QC/QA test and is proved satisfactory, the representative will no longer be required onsite but should be made available for future consultation.

ALL EXISTING PJS EXPANSION SEALS FOR THESE STRUCTURES SHALL BE REMOVED AS INCIDENTAL TO "BLAST CLEANING BRIDGE JOINT STEEL"

The SSPC-QP1 and SSPC-QP2 Painting Contractor Certifications will not be required for this bridge.

AIR MONITORS, will not be required for this project

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 155	D4 BRIDGE METALIZING 08	TAZEWELL	11	2

COMMITMENTS
GENERAL NOTES

Summary of Quantities

Code Order

ROUTE		SECTION	COUNTY	SHEET	
FAI	155	D4 BRIDGE METALLIZING 2008	TAZEWELL	TOTAL	NO.
1	155			11	3
			CONTRACT NO.	68708	

CONSTRUCTION TYPE CODE	
090-0128	090-0129
SFTV-2A	SFTV-2A
100% STATE	100% STATE

CODE No.	ITEM	UNIT	Tot.QTY		
50608600	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES	L SUM	1	0.5	0.5
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	4	2	2
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	0.5	0.5
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1	0.5	0.5
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.5	0.5
X0325215	THERMAL SPRAYING (METALIZING) BRIDGE JOINT STEEL	FOOT	207	103.5	103.5
X0325217	BLAST CLEANING BRIDGE JOINT STEEL	FOOT	207	103.5	103.5
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	6	3	3
X0325381	FIELD THERMAL SPRAYING (METALLIZING) STRUCTURAL STEEL NO. 1	L SUM	1	1	1
X0325382	FIELD THERMAL SPRAYING (METALLIZING) STRUCTURAL STEEL NO. 2	L SUM	1	1	1
X0326105	THERMAL SPRAYING (METALIZING) BRIDGE CONCRETE SURFACE	SQ FT	308.4	62.5	245.9

Summary of Quantities

Code Order

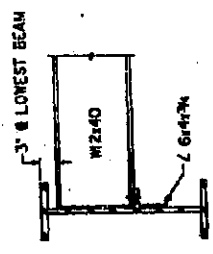
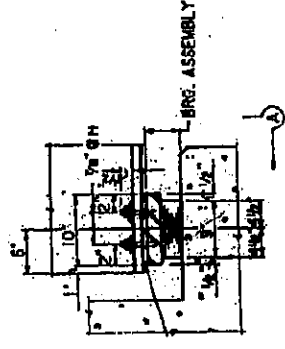
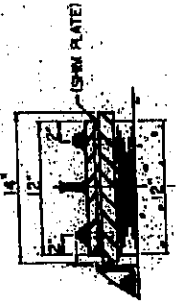
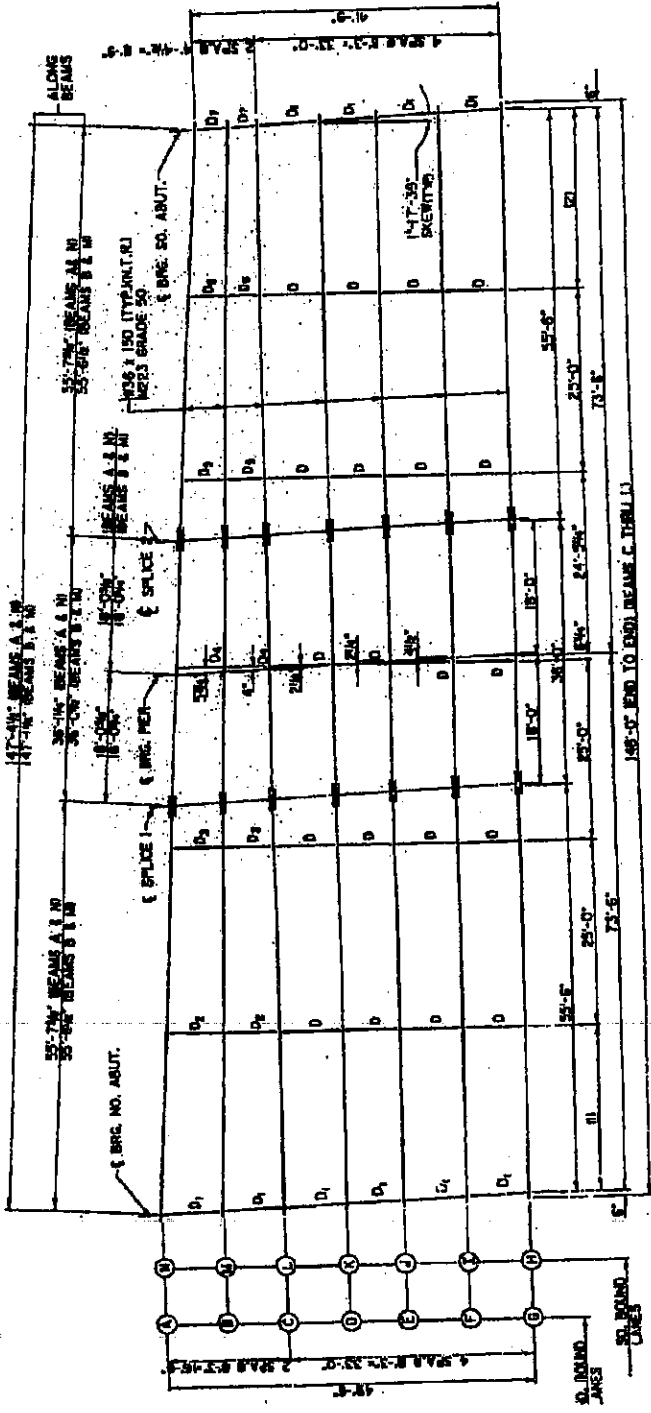
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		D4 BRIDGE METALIZING 2008			TOTAL	NO.
FAI	155			TAZEWELL	11	4
I	155			CONTRACT NO.	68708	

CONSTRUCTION TYPE CODE	
090-0128	090-0129
SFTY-2A	SFTY-2A
100% ST.	100% ST.

CODE No.	ITEM	UNIT	Tot.QTY	SQ FT	308.4	62.5	245.9
X0326106	BLAST CLEANING BRIDGE CONCRETE SURFACE						

ALL BEAMS 36 x 150

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-155	D4 BRIDGE METALZING 08 TAZEWELL		11	6



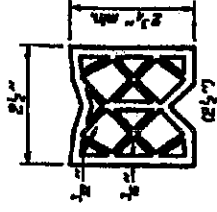
SECTION AT ABUTMENTS

FRAMING PLAN

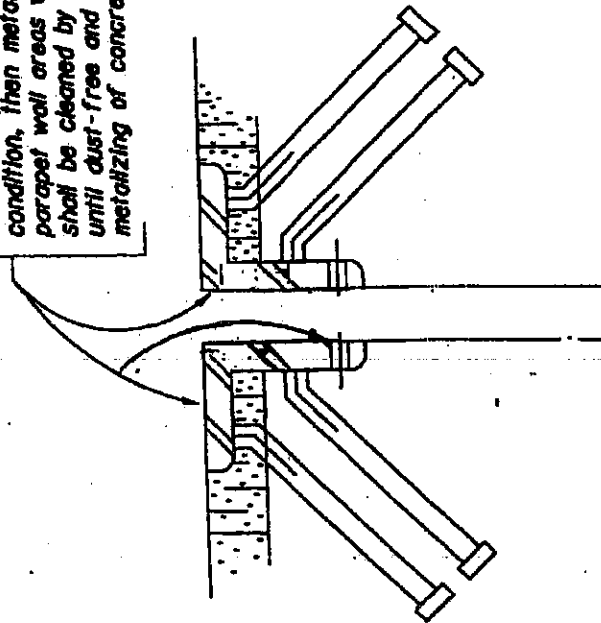
DIAPHRAGMS D1 & D7
20' D1, 4' D7 REQUIRED

ROUTE	SECTION	COUNTY	TOTAL	SHEET NO
I-155 D4 BRIDGE METALIZING 08		TAZEWELL	11	7

All exposed and accessible (from the top) steel surfaces shall be blasted to near white condition, then metalized. In sidewalk and parapet wall areas w/o steel, the concrete shall be cleaned by blasting and blowing clean until dust-free and dry prior to sealant application; metalizing of concrete is not required.



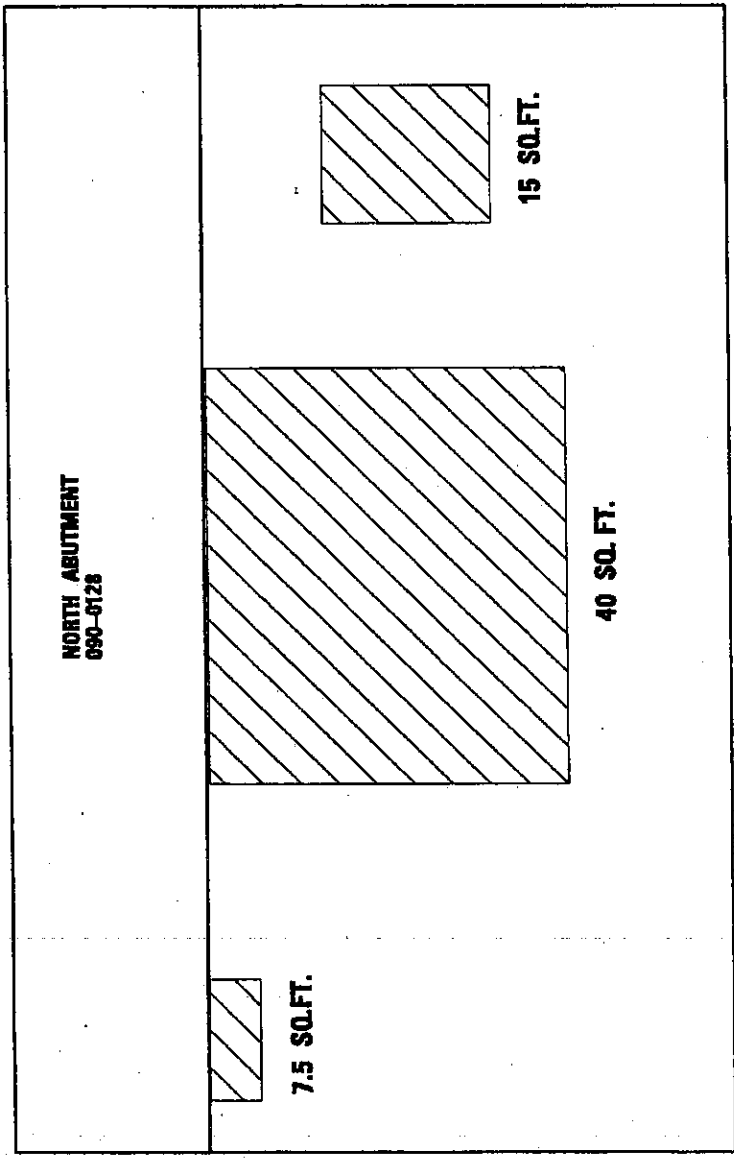
EXISTING PREFORMED JOINT SEAL TO BE REMOVED



EXISTING BRIDGE JOINT TO BE SANDBLASTED

JOINT DETAIL

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-155	D4 BRIDGE METALIZING 08	VARIOUS	11	8

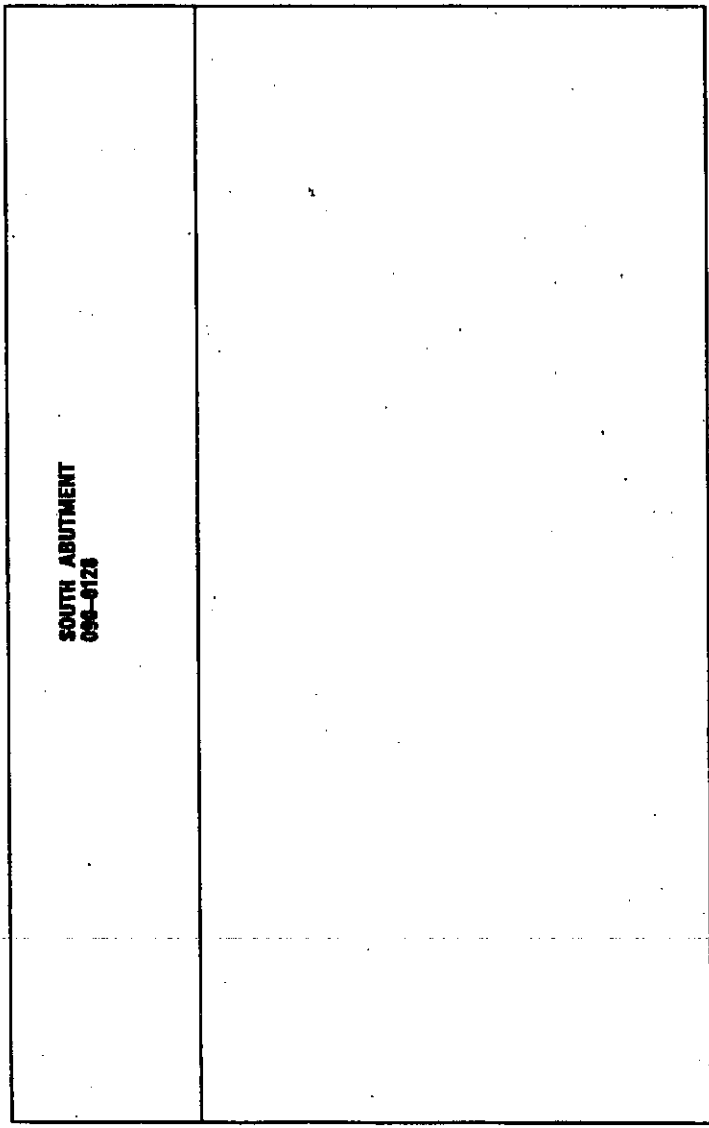


SUMMARY 62.5 SQ. FT.

**PLAN SHEET
090-0128
N.ABUTMENT**

AREAS TO CHIP AND METALIZE

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-155	D4 BRIDGE METALIZING 08	VARIOUS	11	9

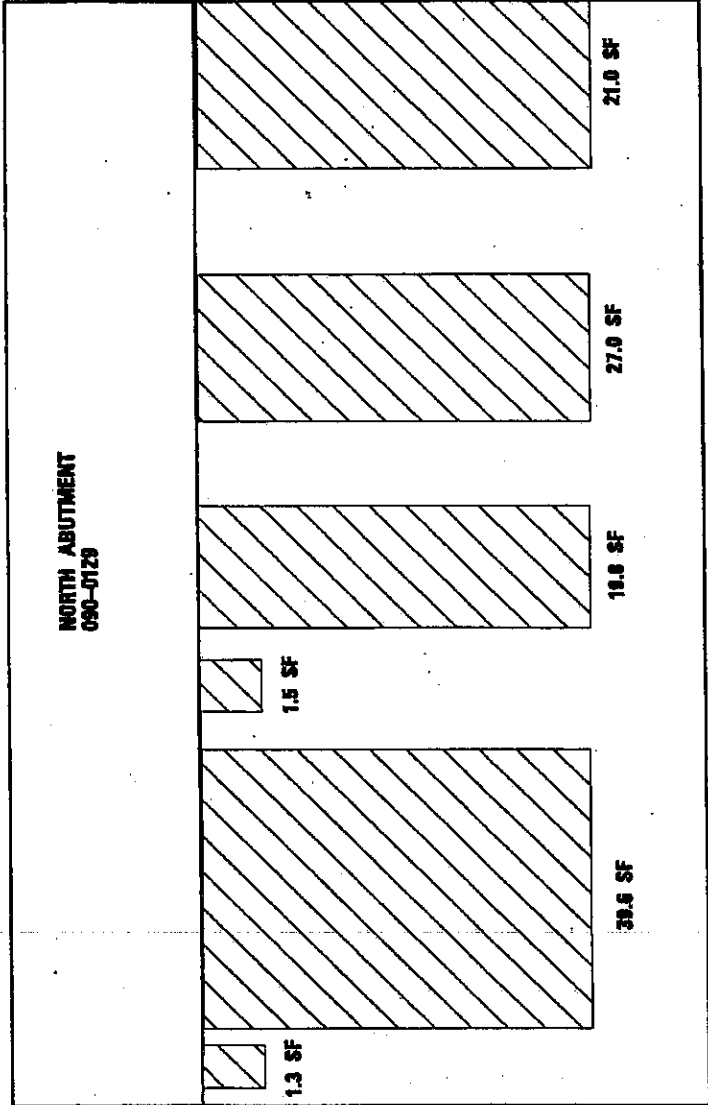


SUMMARY 0.0 SQ. FT.

AREAS TO CHIP AND METALIZE

PLAN SHEETS
090-0128
S. ABUTMENT

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-155	D4 BRIDGE METALIZING 08	VARIOUS	11	10

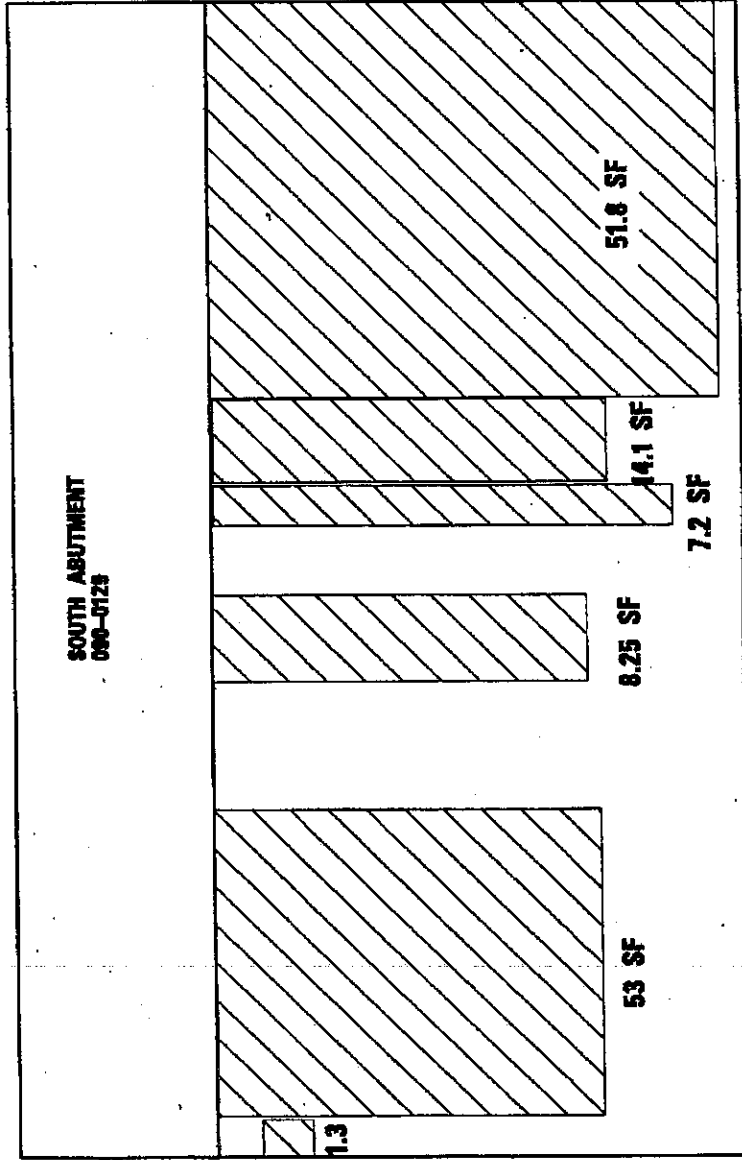


SUMMARY 110.2 SQ. FT.

PLAN SHEET
090-0129
N.ABUTMENT

AREAS TO CHIP AND METALIZE

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-155 D4 BRIDGE METALIZING 08		TAZEWELL	11	11



SUMMARY 135.65 SQ. FT.

PLAN SHEETS
090-0129
S.ABUTMENT

AREAS TO CHIP AND METALIZE

ILLINOIS DEPARTMENT OF LABOR

PREVAILING WAGES FOR TAZEWELL COUNTY EFFECTIVE MAY 2008

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

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

Tazewell County Prevailing Wage for May 2008

Trade Name	RG	TYP	C	Base	FRMAN	*M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng
=====	==	===	=	=====	=====	=====	===	===	=====	=====	=====	=====
ASBESTOS ABT-GEN	NW	BLD		24.200	25.700	1.5	1.5	2.0	6.250	10.09	0.000	0.750
ASBESTOS ABT-GEN	NW	HWY		25.640	26.390	1.5	1.5	2.0	6.250	10.71	0.000	0.700
ASBESTOS ABT-GEN	SE	BLD		24.690	25.440	1.5	1.5	2.0	6.300	8.030	0.000	0.700
ASBESTOS ABT-MEC		BLD		25.480	27.230	1.5	1.5	2.0	8.760	6.410	0.000	0.310
BOILERMAKER		BLD		30.970	33.970	2.0	2.0	2.0	8.270	7.740	0.000	0.300
BRICK MASON		BLD		27.020	28.520	1.5	1.5	2.0	6.250	7.350	0.000	0.420
CARPENTER		BLD		26.540	28.540	1.5	1.5	2.0	6.750	8.150	0.000	0.320
CARPENTER		HWY		27.340	29.340	1.5	1.5	2.0	6.750	8.520	0.000	0.320
CEMENT MASON		BLD		24.220	25.970	1.5	1.5	2.0	5.490	10.44	0.000	0.500
CEMENT MASON		HWY		25.500	26.500	1.5	1.5	2.0	5.490	10.44	0.000	0.500
CERAMIC TILE FNSHER		BLD		24.910	0.000	1.5	1.5	2.0	6.250	7.350	0.000	0.420
ELECTRIC PWR EQMT OP		ALL		30.750	0.000	1.5	1.5	2.0	4.750	8.610	0.000	0.000
ELECTRIC PWR GRNDMAN		ALL		21.090	0.000	1.5	1.5	2.0	4.750	5.905	0.000	0.000
ELECTRIC PWR LINEMAN		ALL		34.160	36.350	1.5	1.5	2.0	4.750	9.560	0.000	0.000
ELECTRIC PWR TRK DRV		ALL		22.130	0.000	1.5	1.5	2.0	4.750	6.200	0.000	0.000
ELECTRICIAN		BLD		29.860	31.860	1.5	1.5	2.0	5.150	8.060	0.000	0.250
ELECTRONIC SYS TECH		BLD		24.830	26.330	1.5	1.5	2.0	5.150	6.145	0.000	0.250
ELEVATOR CONSTRUCTOR		BLD		35.615	40.070	2.0	2.0	2.0	8.775	6.960	2.140	0.000
GLAZIER		BLD		27.020	27.770	1.5	1.5	2.0	6.400	5.750	0.000	0.500
HT/FROST INSULATOR		BLD		36.400	38.150	1.5	1.5	2.0	8.760	10.11	0.000	0.310
IRON WORKER		BLD		26.310	28.060	1.5	1.5	2.0	8.140	7.810	0.000	0.400
IRON WORKER		HWY		28.570	30.070	1.5	1.5	2.0	8.140	7.810	0.000	0.350
LABORER	NW	BLD		23.200	24.700	1.5	1.5	2.0	6.250	10.09	0.000	0.700
LABORER	NW	HWY		24.890	25.640	1.5	1.5	2.0	6.250	10.71	0.000	0.700
LABORER	SE	BLD		24.690	25.440	1.5	1.5	2.0	6.300	8.030	0.000	0.700
LABORER	SE	HWY		26.300	27.300	1.5	1.5	2.0	6.300	8.030	0.000	0.700
LATHER		BLD		26.540	28.540	1.5	1.5	2.0	6.750	8.150	0.000	0.320
MACHINERY MOVER		HWY		28.570	30.070	1.5	1.5	2.0	8.140	7.810	0.000	0.350
MACHINIST		BLD		38.390	40.390	2.0	2.0	2.0	4.880	6.550	2.650	0.000
MARBLE FINISHERS		BLD		24.910	0.000	1.5	1.5	2.0	6.250	7.350	0.000	0.420
MARBLE MASON		BLD		26.520	27.770	1.5	1.5	2.0	6.250	7.350	0.000	0.420
MILLWRIGHT		BLD		27.180	29.180	1.5	1.5	2.0	6.750	7.850	0.000	0.320
MILLWRIGHT		HWY		28.410	30.410	1.5	1.5	2.0	6.750	7.950	0.000	0.320
OPERATING ENGINEER		BLD	1	29.420	32.420	1.5	1.5	2.0	6.450	10.00	0.000	1.100
OPERATING ENGINEER		BLD	2	27.360	32.420	1.5	1.5	2.0	6.450	10.00	0.000	1.100
OPERATING ENGINEER		BLD	3	25.850	32.420	1.5	1.5	2.0	6.450	10.00	0.000	1.100
OPERATING ENGINEER		HWY	1	30.300	33.300	1.5	1.5	2.0	6.450	10.00	0.000	1.100
OPERATING ENGINEER		HWY	2	27.790	33.300	1.5	1.5	2.0	6.450	10.00	0.000	1.100
OPERATING ENGINEER		HWY	3	23.640	33.300	1.5	1.5	2.0	6.450	10.00	0.000	1.100
PAINTER		ALL		29.850	31.850	1.5	1.5	1.5	6.750	6.750	0.000	0.500
PAINTER SIGNS		BLD		28.970	32.520	1.5	1.5	1.5	2.600	2.310	0.000	0.000
PILEDRIVER		BLD		27.040	29.040	1.5	1.5	2.0	6.750	8.150	0.000	0.320
PILEDRIVER		HWY		28.340	30.340	1.5	1.5	2.0	6.750	8.520	0.000	0.320
PIPEFITTER		BLD		32.830	36.440	1.5	1.5	2.0	6.450	8.240	0.000	0.610
PLASTERER		BLD		24.490	25.740	1.5	1.5	2.0	5.490	10.24	0.000	0.500
PLUMBER		BLD		29.630	32.300	1.5	1.5	2.0	6.450	9.550	0.000	0.900
ROOFER		BLD		25.250	26.250	1.5	1.5	2.0	5.550	6.700	0.000	0.150
SHEETMETAL WORKER		BLD		28.740	30.180	1.5	1.5	2.0	5.770	10.21	0.000	0.310
SIGN HANGER		HWY		28.570	30.070	1.5	1.5	2.0	8.140	7.810	0.000	0.350
SPRINKLER FITTER		BLD		35.140	37.690	1.5	1.5	2.0	7.000	6.200	0.000	0.250
STEEL ERECTOR		HWY		28.570	30.070	1.5	1.5	2.0	8.140	7.810	0.000	0.350
STONE MASON		BLD		27.020	28.520	1.5	1.5	2.0	6.250	7.350	0.000	0.420
TERRAZZO FINISHER		BLD		24.910	0.000	1.5	1.5	2.0	6.250	7.350	0.000	0.420
TERRAZZO MASON		BLD		26.520	27.770	1.5	1.5	2.0	6.250	7.350	0.000	0.420
TILE MASON		BLD		26.520	27.770	1.5	1.5	2.0	6.250	7.350	0.000	0.420
TRUCK DRIVER		ALL	1	27.457	0.000	1.5	1.5	2.0	8.600	3.797	0.000	0.000
TRUCK DRIVER		ALL	2	27.857	0.000	1.5	1.5	2.0	8.600	3.797	0.000	0.000
TRUCK DRIVER		ALL	3	28.057	0.000	1.5	1.5	2.0	8.600	3.797	0.000	0.000

TRUCK DRIVER	ALL	4	28.307	0.000	1.5	1.5	2.0	8.600	3.797	0.000	0.000
TRUCK DRIVER	ALL	5	29.057	0.000	1.5	1.5	2.0	8.600	3.797	0.000	0.000
TRUCK DRIVER	O&C	1	21.970	0.000	1.5	1.5	2.0	8.600	3.797	0.000	0.000
TRUCK DRIVER	O&C	2	22.290	0.000	1.5	1.5	2.0	8.600	3.797	0.000	0.000
TRUCK DRIVER	O&C	3	22.450	0.000	1.5	1.5	2.0	8.600	3.797	0.000	0.000
TRUCK DRIVER	O&C	4	22.650	0.000	1.5	1.5	2.0	8.600	3.797	0.000	0.000
TRUCK DRIVER	O&C	5	23.250	0.000	1.5	1.5	2.0	8.600	3.797	0.000	0.000
TUCKPOINTER	BLD		27.020	28.520	1.5	1.5	2.0	6.250	7.350	0.000	0.420

Legend:

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

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

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

H/W (Health & Welfare Insurance)

Pensn (Pension)

Vac (Vacation)

Trng (Training)

Explanations

TAZEWELL COUNTY

ASBESTOS - See Laborers

CARPENTERS (NORTH) - That part of the county North including the towns of Marquette Hts., Morton, Creve Coeur and Deer Creek.

LABORERS (NORTHWEST) - The area bounded by the old city limits of East Peoria.

MILLWRIGHTS - See Carpenters

PILEDRIVERS - See Carpenters

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

Oil and chip resealing (O&C) means the application of road oils and liquid asphalt to coat an existing road surface, followed by application of aggregate chips or gravel to coated surface, and subsequent rolling of material to seal the surface.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems

where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - Removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

CERAMIC TILE FINISHER, MARBLE FINISHER, TERRAZZO FINISHER

Assisting, helping or supporting the tile, marble and terrazzo mechanic by performing their historic and traditional work assignments required to complete the proper installation of the work covered by said crafts. The term "Ceramic" is used for naming the classification only and is in no way a limitation of the product handled. Ceramic takes into consideration most hard tiles.

ELECTRONIC SYSTEMS TECHNICIAN

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.

Excluded from this classification are energy management systems, life safety systems, supervisory controls and data acquisition systems not intrinsic with the above listed systems, fire alarm systems, nurse call systems and raceways exceeding fifteen feet in length.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Drivers on 2 axle trucks hauling less than 9 ton. Air compressor and welding machines and brooms, including those pulled by separate units, truck driver helpers, warehouse employees, mechanic helpers, greasers and tiremen, pickup trucks when hauling materials, tools, or workers to and from and on-the-job site, and fork lifts up to 6,000 lb. capacity.

Class 2. Two or three axle trucks hauling more than 9 ton but hauling less than 16 ton. A-frame winch trucks, hydrolift trucks, vector trucks or similar equipment when used for transportation purposes. Fork lifts over 6,000 lb. capacity, winch trucks, four axle combination units, and ticket writers.

Class 3. Two, three or four axle trucks hauling 16 ton or more. Drivers on water pulls, articulated dump trucks, mechanics and working forepersons, and dispatchers. Five axle or more combination units.

Class 4. Low Boy and Oil Distributors.

Class 5. Drivers who require special protective clothing while employed on hazardous waste work.

TRUCK DRIVER - OIL AND CHIP RESEALING ONLY.

This shall encompass laborers, workers and mechanics who drive contractor or subcontractor owned, leased, or hired pickup, dump, service, or oil distributor trucks. The work includes transporting

materials and equipment (including but not limited to, oils, aggregate supplies, parts, machinery and tools) to or from the job site; distributing oil or liquid asphalt and aggregate; stock piling material when in connection with the actual oil and chip contract. The Truck Driver (Oil & Chip Resealing) wage classification does not include supplier delivered materials.

OPERATING ENGINEERS - BUILDING

Class 1. Cranes; Overhead Cranes; Gradall; All Cherry Pickers; Mechanics; Central Concrete Mixing Plant Operator; Road Pavers (27E - Dual Drum - Tri Batchers); Blacktop Plant Operators and Plant Engineers; 3 Drum Hoist; Derricks; Hydro Cranes; Shovels; Skimmer Scoops; Koehring Scooper; Drag Lines; Backhoe; Derrick Boats; Pile Drivers and Skid Rigs; Clamshells; Locomotive Cranes; Dredge (all types) Motor Patrol; Power Blades - Dumore - Elevating and similar types; Tower Cranes (Crawler-Mobile) and Stationary; Crane-type Backfiller; Drott Yumbo and similar types considered as Cranes; Caisson Rigs; Dozer; Tournadozer; Work Boats; Ross Carrier; Helicopter; Tournapulls - all and similar types; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip Form Paver; Rock Crusher; Heavy Equipment Greaser; CMI, CMI Belt Placer, Auto Grade & 3 Track and similar types; Side Booms; Multiple Unit Earth Movers; Creter Crane; Trench Machine; Pump-crete-Belt Crete-Squeeze Cretes-Screw-type Pumps and Gypsum; Bulker & Pump - Operator will clean; Formless Finishing Machine; Flaherty Spreader or similar types; Screed Man on Laydown Machine; Wheel Tractors (industrial or Farm-type w/Dozer-Hoe-Endloader or other attachments); F.W.D. & Similar Types; Vermeer Concrete Saw.

Class 2. Dinkeys; Power Launches; PH One-pass Soil Cement Machine (and similar types); Pugmill with Pump; Backfillers; Euclid Loader; Forklifts; Jeeps w/Ditching Machine or other attachments; Tuneluger; Automatic Cement and Gravel Batching Plants; Mobile Drills (Soil Testing) and similar types; Gurries and Similar Types; (1) and (2) Drum Hoists (Buck Hoist and Similar Types); Chicago Boom; Boring Machine & Pipe Jacking Machine; Hydro Boom; Dewatering System; Straw Blower; Hydro Seeder; Assistant Heavy Equipment Greaser on Spread; Tractors (Track type) without Power Unit pulling Rollers; Rollers on Asphalt -- Brick Macadem; Concrete Breakers; Concrete Spreaders; Mule Pulling Rollers; Center Stripper; Cement Finishing Machines & CMI Texture & Reel Curing Machines; Cement Finishing Machine; Barber Green or similar loaders; Vibro Tamper (All similar types) Self-propelled; Winch or Boom Truck; Mechanical Bull Floats; Mixers over 3 Bag to 27E; Tractor pulling Power Blade or Elevating Grader; Porter Rex Rail; Clary Screed; Truck Type Hoptoe Oilers; Fireman; Spray Machine on Paving; Curb Machines; Truck Crane Oilers; Oil Distributor; Truck-Mounted Saws.

Class 3. Air Compressor; Power Subgrader; Straight Tractor; Trac Air without attachments; Herman Nelson Heater, Dravo, Warner, Silent Glo, and similar types; Roller: Five (5) Ton and under on Earth or Gravel; Form Grader; Crawler Crane & Skid Rig Oilers; Freight Elevators - permanently installed; Pump; Light Plant; Generator; Conveyor (1) or (2) - Operator will clean; Welding Machine; Mixer (3) Bag and Under (Standard Capacity with skip); Bulk Cement Plant; Oiler on Central Concrete Mixing Plant.

OPERATING ENGINEERS - HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Cranes; Hydro Crane; Shovels; Crane Type Backfiller; Tower Cranes - Mobile & Crawler & Stationary; Derricks & Hoists (3 Drum); Draglines; Drott Yumbo & similar types considered as Cranes; Back

Hoe; Derrick Boats; Pile Driver and Skid Rigs; Clam Shell; Locomotive - Cranes; Road Pavers - Single Drum - Dual Drum - Tri Batcher; Motor Patrols & Power Blades - Dumore - Elevating & Similar Types; Mechanics; Central Concrete Mixing Plant Operator; Asphalt Batch Plant Operators and Plant Engineers; Gradall; Caisson Rigs; Skimmer Scoop - Koering Scooper; Dredges (all types); Hoptoe; All Cherry Pickers; Work Boat; Ross Carrier; Helicopter; Dozer; Tournadozer; Tournapulls - all and similar types; Multiple Unit Earth Movers; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip Form Paver; Rock Crusher; Heavy Equipment Greaser (top greaser on spread); CMI, Auto Grade, CMI Belt Placer & 3 Track and similar types; Side Booms; Starting Engineer on Pipeline; Asphalt Heater & Planer Combination (used to plane streets); Wheel Tractors (with dozer, hoe or endloader attachments); F.W.D. and Similar types; Blaw Knox Spreader and Similar types; Trench Machines; Pump Crete - Belt Crete - Squeeze Crete - screw type pumps and gypsum (operator will clean); Formless Finishing Machines; Flaherty Spreader or similar types; Screed Man on Laydown Machine; Vermeer Concrete Saw.

Class 2. Bulker & Pump; Power Launches; Boring Machine & Pipe Jacking Machine; Dinkeys; P-H One Pass Soil Cement Machines and similar types; Wheel Tractors (Industry or farm type - other); Back Fillers; Euclid Loader; Fork Lifts; Jeep w/Ditching Machine or other attachments; Tunneluger; Automatic Cement & Gravel Batching Plants; Mobile Drills - Soil Testing and similar types; Pugmill with pump; All (1) and (2) Drum Hoists; Dewatering System; Straw Blower; Hydro-Seeder; Boring Machine; Hydro-Boom; Bump Grinders (self-propelled); Assistant Heavy Equipment Greaser; Apsco Spreader; Tractors (track-type) without Power Units Pulling Rollers on Asphalt - Brick or Macadam; Concrete Breakers; Concrete Spreaders; Cement Strippers; Cement Finishing Machines & CMI Texture & Reel Curing Machines; Vibro-Tampers (all similar types self-propelled); Mechanical Bull Floats; Self-propelled Concrete Saws; Mixers-over three (3) bags to 27E; Winch and Boom Trucks; Tractor Pulling Power Blade or Elevating Grader; Porter Rex Rail; Clary Screed; Mule Pulling Rollers; Pugmill without Pump; Barber Greene or similar Loaders; Track Type Tractor w/Power Unit attached (minimum); Fireman; Spray Machine on Paving; Curb Machines; Paved Ditch Machine; Power Broom; Self-Propelled Conveyors; Power Subgrader; Oil Distributor; Straight Tractor; Truck Crane Oiler; Truck Type Oilers; Directional boring machine; Horizontal directional drill.

Class 3. Straight framed articulating end dump vehicles and Truck mounted vac unit (separately powered); Trac Air Machine (without attachments); Herman Nelson Heater, Dravo Warner, Silent Glo & similar types; Rollers - five ton and under on earth and gravel; Form Graders; Pumps; Light Plant; Generator; Air Compressor (1) or (2); Conveyor; Welding Machine; Mixer - 3 bags and under; Bulk Cement Plant; Oilers.

Other Classifications of Work:

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

clarifications.

LANDSCAPING

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