

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

PREQUALIFICATION

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

REQUESTS FOR AUTHORIZATION TO BID

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

WHO CAN BID ?

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

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

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

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

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

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

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

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

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

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

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

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

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

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

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

ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

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

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RETURN WITH BID

Proposal Submitted By
Name
Address
City

Letting November 17, 2006

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. 64606
ROCK ISLAND County
Section (81-1B)P-2
District 2 Construction Funds
Route FAI 280**

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.

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.

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Questions Regarding	Call
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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. 64606
ROCK ISLAND County
Section (81-1B)P-2
Route FAI 280
District 2 Construction Funds**

This project consists of bridge washing and zone painting (partial cleaning and painting) of the Interstate 280 Mississippi River bridge.

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

RETURN WITH BID

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

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

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

Schedule of Combination Bids

Combination No.	Sections Included in Combination	Combination Bid	
		Dollars	Cents

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

8. **CERTIFICATE OF AUTHORITY.** The undersigned bidder, if a business organized under the laws of another State, assures the Department that it will furnish a copy of its certificate of authority to do business in the State of Illinois with the return of the executed contract and bond. Failure to furnish the certificate within the time provided for execution of an awarded contract may be cause for cancellation of the award and forfeiture of the proposal guaranty to the State.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER - 64606

State Job # - C-92-092-05
 PPS NBR - 2-13910-0200
 County Name - ROCK ISLAND- -
 Code - 161 - -
 District - 2 - -
 Section Number - (81-1B)P-2

Project Number

Route
 FAI 280

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
Z0030250	IMP ATTN TEMP NRD TL3	EACH	1.000				
Z0030350	IMP ATTN REL NRD TL3	EACH	4.000				
50600300	CLEAN PAINT STEEL BR	L SUM	1.000				
50606400	C&D LEAD PT CL RES	L SUM	1.000				
59200100	BRIDGE WASHING	EACH	1.000				
67100100	MOBILIZATION	L SUM	1.000				
70100420	TRAF CONT-PROT 701411	EACH	1.000				
70100700	TRAF CONT-PROT 701406	L SUM	1.000				
70100805	TRAF CONT-PROT 701402	L SUM	1.000				
70400100	TEMP CONC BARRIER	FOOT	750.000				
70400200	REL TEMP CONC BARRIER	FOOT	1,300.000				

CONTRACT NUMBER

64606

THIS IS THE TOTAL BID

\$ _____

NOTES:

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

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

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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.

TO BE RETURNED WITH BID

IV. DISCLOSURES

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

B. Financial Interests and Conflicts of Interest

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

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

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

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

C. Disclosure Form Instructions

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

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

CERTIFICATION STATEMENT

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

(Bidding Company)

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative

Date

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

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

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO ___
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$90,420.00? YES ___ NO ___
3. Does anyone in your organization receive more than \$90,420.00 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES ___ NO ___
4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than \$90,420.00? YES ___ NO ___

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

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

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

Form B: Identifying Other Contracts & Procurement Related Information Disclosure Form B must be completed for each bid submitted by the bidding entity. It must be signed by an individual who is authorized to execute contracts for the bidding entity. *Note: Signing the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, signed and dated or the bidder may be considered nonresponsive and the bid will not be accepted.*

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

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

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

D. Bidders Submitting More Than One Bid

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

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

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

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

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

FOR INDIVIDUAL (type or print information)

NAME: _____

ADDRESS _____

Type of ownership/distributable income share:

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

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

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

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

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

2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) provide the name the State agency for which you are employed and your annual salary. _____

RETURN WITH BID/OFFER

- 3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes ___ No ___
- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you and your spouse or minor children entitled to receive (i) more than 15 % in 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 \$90,420.00, (60 % of the Governor's salary as of 7/1/01) 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 \$90,420.00, (60% of the salary of the Governor as of 7/1/01) 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 \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you and your spouse or minor children entitled to receive (i) more than 15 % in 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: _____
Name of Authorized Representative (type or print)

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

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

NOT APPLICABLE STATEMENT

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

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

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative Date _____

RETURN WITH BID/OFFER

ILLINOIS DEPARTMENT
OF TRANSPORTATION

Form B
Other Contracts &
Procurement Related Information
Disclosure

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

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

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

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

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

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

THE FOLLOWING STATEMENT MUST BE SIGNED

Name of Authorized Representative (type or print)	

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

RETURN WITH BID

SPECIAL NOTICE TO CONTRACTORS

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

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

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

RETURN WITH BID

**Contract No. 64606
ROCK ISLAND County
Section (81-1B)P-2
Route FAI 280
District 2 Construction Funds**

PART II. WORKFORCE PROJECTION - continued

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

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

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

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

PART III. AFFIRMATIVE ACTION PLAN

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

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

Company _____ Telephone Number _____

Address _____

NOTICE REGARDING SIGNATURE

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

Signature: _____ Title: _____ Date: _____

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

RETURN WITH BID

**Contract No. 64606
ROCK ISLAND County
Section (81-1B)P-2
Route FAI 280
District 2 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.



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...

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH, That Whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF ILLINOIS...

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...

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.

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

PRINCIPAL SURETY
(Company Name) (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...

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

My commission expires Notary Public

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

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

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

Name:
Address:
Phone No.

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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

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

**Contract No. 64606
ROCK ISLAND County
Section (81-1B)P-2
Route FAI 280
District 2 Construction Funds**



Illinois Department of Transportation



NOTICE TO BIDDERS

1. **TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., November 17, 2006. 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. 64606
ROCK ISLAND County
Section (81-1B)P-2
Route FAI 280
District 2 Construction Funds**

This project consists of bridge washing and zone painting (partial cleaning and painting) of the Interstate 280 Mississippi River bridge.

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

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

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

By Order of the
Illinois Department of Transportation

Timothy W. Martin, Secretary

BD 351 (Rev. 01/2003)

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

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

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

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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, 2002, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of FAI Route 280 (I-280), Section (81-1B)P-2, Rock Island County, Contract 64606, 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

Interstate Route 280 over the Mississippi River southwest of Rock Island. (Structure Number 081-0106)

DESCRIPTION OF PROJECT

Bridge washing and zone painting (partial cleaning and painting) of the I-280 Mississippi River Bridge.

TRAFFIC CONTROL PLAN

Effective January 14, 1999

Traffic Control shall be according to the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the National Manual on Uniform Traffic Control Devices for Streets and Highways, Illinois Supplement to the National Manual on Uniform Traffic Control Devices, these special provisions, and any special details and Highway Standards contained herein and in the plans.

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

Standards:

701101 701400 701402 701406 701411 702001 704001

Work Zone Traffic Control Devices: Vertical barricades shall not be used in lane closure tapers, in weaves, and in the gore areas on Highway Standard 701411.

Equipment Illumination: The Contractor shall equip all machinery and vehicles with revolving amber lights, installed so the illumination is visible from all directions.

Median Crossover: The median crossover will generally not be available for Contractor use. It may be used only when both lanes adjacent to the median are closed. Under no condition shall left turn lanes be made to cross the median from lanes open to traffic.

Vehicle Parking: Parking of personal vehicles within the interstate right of way will be strictly prohibited. Parking of construction equipment within the right of way will be permitted only at locations approved by the Engineer.

Temporary Pavement Marking Tape. Pavement marking tape may only be used one time. Each stage requires new pavement marking tape and it may not be reused.

MAINTENANCE OF TRAFFIC

All cleaning and painting work shall be protected with barrier wall. Use Traffic Control and Protection Standards 701400 and 701406 to install Standard 701402 at the arch span and at Pier 7. Refer to the traffic control plan provided.

COMPLETION DATE

Effective February 2, 2001

The Contractor shall perform his work in such a manner that the project is open to two-way traffic, on or prior to August 15, 2007. The project shall have all cleaning and painting completed before it is open to traffic. If the Contractor fails to complete all washing, cleaning, and painting by the above completion date, the Contractor shall be charged liquidated damages by the Department of SEVEN HUNDRED TWENTY FIVE DOLLARS (\$725) a day for each day the project is not completed beyond the completion date. If in the event additional traffic control and protection is required to open the road or after the road is open to traffic, it shall be at the Contractor's expense.

BRIDGE WASHING

The entire deck surface, all deck drains, drain troughs below finger joints, all deck joints, all parapets, approach pavements and approach shoulders, and the steel arches and hanger cables to 10' above the deck shall be washed.

The outside and bottom of both fascia girders shall be washed. Also all interior beams 10' out from both abutments and 10' from the center of piers 3, 7, 10, 13, 14, 17, 20, and 24 including bracing, diaphragms, and bearings. Also all abutment walls, wingwalls, and the above numbered pier caps.

The entire concrete slopewalls shall be washed.

At the arch suspension span all structural steel below the deck shall be washed including the inspection walkway.

Traffic Control Standards 701400 & 701406 shall be utilized when washing on this structure.

This work is separate from the washing that is required prior to painting. Additional washing is required as part of the Special Provision for Cleaning and Painting Existing Steel Structures. Washing of surfaces to be overcoated must be washed again if the surfaces to be overcoated are not painted within 2 weeks.

This washing is considered annual maintenance for the removal of dirt, bird droppings, and other debris from various surfaces on the bridge. The water does not need to be collected for the washing described in this Special Provision.

The method of washing shall be in accordance with Section 592 of the Standard Specifications.

This item will be paid for Each for Bridge Washing.

CLEANING AND PAINTING STEEL BRIDGE

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". The following areas shall be cleaned per Near White Blast Cleaning – SSPC –SP10.

- All Beams, Bearings, and other structural steel within 5 feet (measured along the beam) of either side of deck joints in the Arch Span and at Pier 7.
- The exterior surfaces of the Arch Ribs from the pier caps up to a line approximately 10' above the deck (go 6" beyond the visible line from where the previous paint project ended; includes all steel door, ladders, cages, etc.)
- All Floorbeams in the Arch Span from the edge of the deck out to the Arch Tie.
- The exterior of the Arch Ties (horizontal box member connecting the ends of the arches) shall be spot cleaned per Near White Blasting Cleaning – SSPC-SP10 to the satisfaction of the Engineer.

The following areas shall be cleaned per Power Tool Cleaning – Modified SSPC-SP3.

- The remaining exterior surfaces of the Arch Ribs, including all struts, cross-members, and diagonals from a horizontal plane approximately 10 feet above the deck (6" above the visible line where the painting from the last painting project ends) and up.

The designated areas cleaned per Near White Blast Cleaning –SSPC-SP10 shall be painted according to the requirements of Paint System 1 – OZ/E/U. The designated areas cleaned per Power Tool Cleaning – Modified SSPC-SP3 shall be painted according to the requirements of Paint System 2 – PS/EM/U. The color of the final finish coat for all interior steel surfaces below

the deck shall be Gray, Munsell No 5B 7/1. The color of the final finish coat for all exterior steel surfaces below the deck shall be Blue, Munsell No 10B 3/6. The color of the final finish coat for the entire arch rib except for the interior surface below the deck shall be Blue, Munsell No 10B 3/6. The color of the final finish coat for the Arch Ties shall be Blue Munsell No 10B 3/6.

Hanger Cables

All hanger cables shall be cleaned by hand with a wire brush, solvent cleaned, and painted with one coat of epoxy and one full coat of aliphatic urethane per System 1.

SHIELDING OF BRIDGE CABLES

Effective January 1, 2006

This work shall consist of applying an approved protective covering to the hanger cables to prevent damage from abrasive blasting operations.

The protective material shall be of sufficient durability to maintain its integrity when sandblasted, yet flexible enough to wrap entirely around the cables and butt up tight to the steel castings to be blast-cleaned.

The Contractor shall submit his or her plan for shielding of the bridge cables according to Section 105.04 and the Special Provision for Cleaning and Painting Existing Steel Structures.

This work will not be paid for separately but will be included in the contract unit price for Cleaning and Painting Existing Steel Structures.

NAVIGATIONAL CONSIDERATIONS AND CONSTRUCTION OVER NAVIGABLE WATERS

Effective May 14, 1998

The proposed plans, schedule and sequence of operations shall first be submitted to the Engineer for review and approval. The submittal to the United States Army Corps of Engineers (Corps) and the United States Coast Guard, shall not be made until it has been reviewed and approved by the Engineer.

The Contractor shall then submit to the Corps and the United States Coast Guard, through the contracting authority, for review and approval, four (4) copies of the proposed plan, schedule and sequence of operations. The submittal shall be made within 7 calendar days, prior to any field work on the bridge.

No deviation from the approved plans, schedule and sequence of operations will be permitted unless the proposed deviation has had the prior approval of the Engineer, the Coast Guard and the Corps.

The work shall be performed in accordance with the requirements of the Corps and the Coast Guard.

The Corps and Coast Guard requirements include, but may not be limited to the requirements specified hereinafter.

The Contractor shall, during the bidding period, determine by his own means and to his own satisfaction any and all other Corps and Coast Guard requirements for the performance of the work of this contract. The Contractor shall determine all costs of compliance with Corps and Coast Guard requirements and shall include said costs in the unit bid price for the scheduled items in the proposal.

At no time during the performance of the work shall the river be closed to navigation.

Scaffolding, rigging, associated supports, and equipment shall not interfere with normal navigation under the bridge.

No existing bridge navigation light shall be blocked.

If permanent bridge or fender navigation lighting cannot be maintained operable, then identical temporary battery- or power-operated lights shall be installed at the same locations. These temporary lights shall be visible for a distance of 2,000 meters on 90 percent of the nights of the year. Generally, a lamp of 20 candlepower will meet these requirements. The temporary lights shall be in place until the project has been completed or permanent navigational lighting has been reinstalled and determined to be operating satisfactorily. Plans for temporary lighting, if used, during periods of project work shall be submitted to the Corps and Coast Guard for written approval. If temporary lights are not installed in the same location as the permanent lights, specific information regarding proposed locations compared to the permanent position shall be provided. Deviations from the approved temporary lighting shall be permitted only upon written authorization from the Corps and Coast Guard.

During the progress of work, should any material, machinery or equipment be lost, dumped, thrown overboard, dropped off the bridge, or sunk so as to obstruct, interfere with or hazard navigation, immediate notice shall be given to the Corps and the object removed as soon as possible. Until removal can be performed, the obstruction shall be properly marked in order to protect navigation. Notice to the Corps shall give a description and location of any such object and action taken or being taken to protect navigation and removal of the obstruction.

Spillage of oil and hazardous substances is specifically prohibited by section 311 of the federal water pollution control act of 1972, as amended. Preventive measures shall be taken including: (1) proper maintenance of construction equipment; (2) arrangement of fuel and hazardous substance handling areas so as to ensure that the any spills are contained before reaching navigable waterways or their adjoining shorelines; (3) instructions to personnel not to dispose of oil or hazardous substances into drains or the navigable waterways directly or onto adjoining shoreline; and (4) other procedures to prevent spillage. If in spite of such planning, oil or hazardous substances are spilled into navigable waterways or adjoining shorelines, the Corps and the U.S. Coast Guard National Response Center (Telephone: 800-424-8802) shall be notified immediately. A supply of an absorbent material shall be retained on hand so that it may be rapidly deployed to soak up any possible spillage, pending arrival of the Corps/ Coast Guard on the scene. The use of chemical dispersing agents and emulsifiers is not authorized without prior, specific, Corps / Coast Guard approval.

It shall be the responsibility of the Contractor to ensure that channel depths are not effected by the project work. Should it be suspected that channel depths have been impaired or that an obstruction resulting from the project work may exist, the Contractor shall upon request of the Corps or the Coast Guard, provide the necessary equipment and personnel to undertake a survey to determine the presence of such impairment or obstruction. The cost for this work shall be the responsibility of the Contractor, at no additional cost to the Department.

Should the Contractor fail to comply with these requirements and should the federal government be required to take some action for the protection of navigation, or for the protection of the environment, the government reserves the right to recover costs for any such action from the Contractor, at no additional cost to the Department.

The federal government and the Department assume no responsibility for any damages sustained or caused by the Contractor's equipment at the site of the work. Any approval shall not act as a waiver of liability for any damage that may result from the Contractor's operation.

The Contractor shall completely remove any project related debris from the river at no additional cost to the Department.

Final payment will not be made unless and until any such project related debris has been removed.

Positive precautions shall be taken to prevent the accidental dropping of spark-producing, flame-producing, lighted or other damaging objects onto barges or vessels passing beneath the bridge. All flame-cutting, welding, and similar spark-producing operations shall be ceased over the channel when vessels are passing beneath the bridge.

If scaffolding or nets are to be suspended below low steel in the navigation span, the U.S. Coast Guard, Second District Office, St. Louis, Missouri, shall be advised so that the temporary reduction in clearance for river traffic can be checked for reasonableness, and appropriate notices can be published. Such scaffolding or nets shall be removed during non-daylight hours.

When removing materials from the bridge, positive precautions shall be taken to ensure that none of the material falls into the river.

CLEANING AND PAINTING EXISTING STEEL STRUCTURES

Effective: October 2, 2001

Revised: February 7, 2005

Description. This work shall consist of the preparation of all designated metal surfaces by the method(s) specified on the plans. This work also includes the painting of those designated surfaces with the paint 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 materials to be used on an individual structure shall be produced by the same manufacturer.

The Bureau of Materials and Physical Research has established a list of all products that have met preliminary requirements. Each batch of material, except for the penetrating sealer, must be tested and approved before use. The specified colors shall be produced in the coating manufacturer's facility. Tinting of the coating after it leaves the manufacturer's facility is not allowed.

The paint materials shall meet the following requirements of the Standard Specification and as noted below:

<u>Item</u>	<u>Article</u>
(a) Waterborne Acrylic	1008.24
(b) Aluminum Epoxy Mastic	1008.25
(c) Organic Zinc Rich Primer (Note 1)	
(d) Epoxy/ Aliphatic Urethane (Note 1)	
(e) Penetrating Sealer (Note 2)	
(f) Moisture Cured Zinc Rich Urethane Primer (Note 3)	
(g) Moisture Cured Aromatic/Aliphatic Urethane (Note 3)	
(h) Moisture Cured Penetrating Sealer (Note 4)	

Note 1: These material requirements shall be according to the Special Provision for the Organic Zinc-Rich Paint System.

Note 2: The Epoxy Penetrating Sealer shall be a cross-linked multi component sealer. The sealer shall have the following properties:

- (a) The volume solids shall be 98%(plus or minus 2%).
- (b) Shall be clear or slightly tinted color.

Note 3: These material requirements shall be according to the Special Provision for the Moisture Cured Urethane Paint System.

Note 4: The Moisture Cured Penetrating Sealer manufacturer's certification will be required.

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 qualifications 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 painting quality as a result of quality control findings.

The program shall incorporate at a minimum, the IDOT Quality Control Daily Report form as supplied by the Engineer.

- c) Inspection Access Plan. The inspection access plan for use by Contractor QC personnel for ongoing inspections and by the Engineer during Quality Assurance (QA) observations.
- d) Surface Preparation/Painting Plan. The surface preparation/painting plan shall include the methods of surface preparation and type of equipment to be utilized for washing, hand/power tool cleaning, removal of rust, mill scale, paint or foreign matter, abrasive blast or water jetting, and remediation of chloride. If detergents, additives, or inhibitors are incorporated into the water, the Contractor shall include the names of the materials and Material Safety Data Sheets (MSDS). The Contractor shall identify the solvents proposed for solvent cleaning together with MSDS.

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) Paint Manufacturer Certifications and Letters. When a sealer is used, the Contractor shall provide the manufacturer's certification of compliance with IDOT testing requirements listed under "Materials" above. A certification regarding the compatibility of the sealer with the specified paint system shall also be included.

When rust inhibitors are used, the Contractor shall provide a letter from the coating manufacturer indicating that the inhibitor is compatible with, and will not adversely affect the performance of the coating system.

If the use of a chemical soluble salt remover is proposed by the Contractor, provide a letter from the coating manufacturer indicating that the material will not adversely effect the performance of the coating system.

The paint manufacturer's application and thinning instructions, MSDS and product data sheets shall be provided, with specific attention drawn to storage temperatures, and the temperatures of the material, surface and ambient air at the time of application.

A letter or written instructions from the coating manufacturer shall be provided indicating the length of time that each coat must be protected from cold or inclement weather (e.g., exposure to rain) during its drying period.

- f) Abrasives. Abrasives to be used for abrasive blast cleaning, including MSDS. For expendable abrasives, the Contractor shall provide certification from the abrasive supplier that the abrasive meets the requirements of SSPC-AB1. For steel grit abrasives, the certification shall indicate that the abrasive meets the requirements of SSPC-AB3.

- g) Protective Coverings. Plan for containing or controlling paint debris (droplets, spills, 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 coating 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.

Contractor Qualifications. Unless indicated otherwise in the contract plans, the painting Contractor shall possess current SSPC-QP1 and SSPC-QP2 certifications at the time of bid, and shall maintain certified status throughout the duration of the painting work under the contract.

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, coating mixing and application, and evaluations between coats and upon project completion). The Contractor shall use the IDOT Quality Control Daily Report form 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 paint spills, overspray, etc.
- Ambient conditions
- Surface preparation (solvent cleaning, pressure washing including chalk tests, hand/power tool or abrasive blast cleaning, etc.)
- Chloride remediation
- Coating application (specified materials, mixing, thinning, and wet/dry film thickness)
- Recoat times and cleanliness between coats
- Coating continuity and coverage (freedom from runs, sags, overspray, dryspray, pinholes, shadow-through, 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 3 projects of similar or greater complexity and scope that have been completed in the last 2 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 coatings inspection and the use of the testing instruments. Documentation of training shall be provided. The QC personnel shall not perform hands on surface preparation or painting activities. Painters shall perform wet film thickness measurements, with QC personnel conducting random spot checks of the wet film. 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 3 for hand/power tool cleaning, VIS 4 for water jetting, and/or VIS 5 for wet abrasive blast cleaning, as applicable.
- Commercially available putty knife of a minimum thickness of 1mm (40 mils) and a width between 25 and 75 mm (1 and 3 in.) Note that the putty knife is only required for projects in which the existing coating is being feathered and must be tested with a dull putty knife.
- Testex Press-O-Film Replica Tape and Spring Micrometer
- Bresle Cell Kits or CHLOR*TEST kits for chloride determinations, or equivalent
- Wet Film Thickness Gage
- 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
- Light meter for measuring light intensity during paint removal, painting, and inspection activities
- All applicable ASTM 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 4-hour notification before a Hold Point inspection will be reached. If the 4-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 4-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.

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.

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 rails 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 1.8 m (6 ft) above the ground or water surface, 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 is more than 800 mm (2 1/2 ft) above the ground, the Contractor shall provide an approved means of access onto the platform.

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 325 LUX (30 foot candles). Illumination for cleaning and painting, including the working platforms, access and entryways shall be at least 215 LUX (20 foot candles).

Surface Preparation and Painting Equipment. All cleaning and 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 or paint as recommended by the equipment manufacturer. The equipment shall be maintained in proper working order.

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.

Hand tools, power tools, pressure washing, water jetting, abrasive blast cleaning equipment, brushes, rollers, and spray equipment shall be of suitable size and capacity to perform the work required by this specification. All power tools shall be equipped with vacuums and High Efficiency Particulate Air (HEPA) filtration. Appropriate filters, traps and dryers shall be provided for the compressed air used for abrasive blast cleaning and conventional spray application. Paint pots shall be equipped with air operated continuous mixing devices unless prohibited by the coating manufacturer.

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 use of the tools and degree of cleaning required (cleanliness and profile) for each method of surface preparation that will be used on the project. Each test section shall be approximately 0.93 sq m (10 sq ft). 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. 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).

For the production cleaning operations, the specifications and written definitions, the test section(s), and the SSPC visual standards shall be used in that order for determining compliance with the contractual requirements.

Protective Coverings and Damage. All portions of the structure that could be damaged by the surface preparation and 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. Paint drips, spills, and overspray are not permitted to escape into the air or onto any other surfaces or surrounding property not intended to be painted. Containment shall be used to control paint drips, spills, and overspray, and shall be dropped and all equipment secured when sustained wind speeds of 64 kph (40 mph) 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 the paint emissions and shall submit a plan for containing or controlling paint debris (droplets, spills, overspray, etc.) to the Engineer for approval prior to starting the work. Approval shall not relieve the Contractor of their ultimate responsibility for controlling paint 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. Painted surfaces damaged by any Contractor's operation shall be repaired, removed and/or repainted, as directed by the Engineer, at the Contractor's expense.

Weather Conditions. Surfaces to be painted after cleaning shall 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 cleaned or painted that day.

- a) The surface temperature shall be at least 3°C (5°F) above the dew point during final surface preparation operations. The manufacturers' published literature shall be followed for specific temperature, dew point, and humidity restrictions during the application of each coat.
- 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) Cleaning and painting shall be done between April 15 and October 31 unless authorized otherwise by the Engineer in writing.

The Contractor shall monitor temperature, dew point, and relative humidity every 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. If the weather conditions after application and during drying are forecast to be outside the acceptable limits established by the coating manufacturer, coating application shall not proceed. If the weather conditions are forecast to be borderline relative to the limits established by the manufacturer, monitoring shall continue at a minimum of 4-hour intervals throughout the drying period. The Engineer has the right to reject any work that was performed, or drying that took place, under unfavorable weather conditions. Rejected work shall be removed, recleaned, and repainted at the Contractor's expense.

Compressed Air Cleanliness. Prior to using compressed air for abrasive blast cleaning, blowing down the surfaces, and painting with conventional spray, 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. Effected work shall be repaired at the Contractor's expense.

Low Pressure Water Cleaning and Solvent Cleaning (HOLD POINT). The Contractor shall notify the Engineer 24 hours in advance of beginning surface preparation operations.

- a) Water Cleaning of Lead Containing Coatings Prior to Overcoating. Prior to initiating any mechanical cleaning such as hand/power tool cleaning on surfaces that are painted with lead, all surfaces to be prepared and painted, and the tops of pier and abutment caps shall be washed. Washing is not required if the surfaces will be prepared by water jetting.

Washing shall involve the use of potable water at a minimum of 7 MPa (1000 psi) and less than 34 MPa (5000 psi) according to "Low Pressure Water Cleaning" of SSPC-SP12. Paint spray equipment shall not be used to perform the water cleaning. The cleaning shall be performed in such a manner as to remove dust, dirt, chalk, insect and animal nests, bird droppings, loose paint and other foreign matter prior to solvent cleaning. The water, debris, and any loose paint removed by water cleaning shall be collected for proper disposal. The washing shall be completed no more than 2 weeks prior to surface preparation.

If detergents or other additives are added to the water, the detergents/additives shall be included in the submittals and not used until accepted by the Engineer. When detergents or additives are used, the surface shall be rinsed with potable water before the detergent water dries.

After washing has been accepted by the Engineer, all traces of asphaltic cement, oil, grease, diesel fuel deposits, and other soluble contaminants which remain on the steel surfaces to be painted 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 solvent(s) used for cleaning shall be compatible with the existing coating system. The Contractor shall identify the proposed solvent(s) in the submittals. If the existing coating is softened, wrinkled, or shows other signs of attack from the solvents, the Contractor shall immediately discontinue their use. The name and composition of replacement solvents, together with MSDS, shall be submitted for Engineer acceptance prior to use.

Under no circumstances shall subsequent hand/power tool cleaning be performed in areas containing surface contaminants or in areas where the Engineer has not accepted the washing and solvent cleaning. Surfaces prepared by hand/power tool cleaning without approval of the washing and solvent cleaning may be rejected by the Engineer. Rejected surfaces shall be re-cleaned with both solvent and the specified mechanical means at the Contractor's expense.

After all washing and mechanical cleaning are completed, representative areas of the existing coating shall be tested to verify that the surface is free of chalk and other loose surface debris or foreign matter. The testing shall be performed according to ASTM D4214. Cleaning shall continue until a chalk rating of 6 or better is achieved in every case.

- b) Water Cleaning of Non-Lead Coatings Prior to Overcoating. Thoroughly clean the surfaces according to the steps defined above for "Water Cleaning of Lead Containing Coatings Prior to Overcoating," except that the wash water does not need to be collected, and if the shop primer is inorganic zinc, the chalk rating does not apply. All other provisions are applicable.
- c) Water Cleaning/Debris Removal Prior to Total Coating Removal. When total coating removal is specified, water cleaning of the surface prior to coating removal is not required by this specification and is at the option of the Contractor. If the Contractor chooses to use water cleaning, and the existing coating contains lead, all water and debris shall be collected for proper disposal.

Whether or not the surfaces are pre-cleaned using water, the tops of the pier caps and abutments shall be cleaned free of dirt, paint chips, insect and animal nests, bird droppings and other foreign matter and the debris collected for proper disposal. If water is used for this cleaning, it shall be collected for disposal.

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.

- d) Water Cleaning Between Coats. When foreign matter has accumulated on a newly applied coat, washing shall be performed prior to the application of subsequent coats. The water does not need to be collected unless it contacts existing lead containing coatings.

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). 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. 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.

When a particular cleaning method is specified for use in distinct zones on the bridge, the cleaning shall extend into the existing surrounding paint until a sound border is achieved. The edge of the existing paint is considered to be sound and intact if it can not be lifted by probing the edge with a dull putty knife. The sound paint shall be feathered for a minimum of 40 mm (1 1/2 in.) to achieve a smooth transition between the prepared steel and the existing coatings. Sanders with vacuum attachments, which have been approved by the Engineer, shall be used as necessary to accomplish the feathering.

- 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) 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 hackles or slivers are visible on the steel surface after cleaning, the Contractor shall remove them by grinding followed by reblast cleaning. At the discretion of the Engineer,

the use of power tools to clean the localized areas after grinding, and to establish a surface profile acceptable to the coating manufacturer, can be used in lieu of 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 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.

- c) Commercial Grade Power Tool Cleaning: This surface preparation shall be accomplished according to the requirements of Commercial Grade Power Tool Cleaning, SSPC-SP15. The designated surfaces shall be completely cleaned with power tools. A Commercial Grade Power Tool Cleaned surface, when viewed without magnification, is free of all visible oil, grease, dirt, rust, coating, oxides, mill scale, corrosion products, and other foreign matter, except for staining. In previously pitted areas, slight residues of rust and paint may also be left in the bottoms of pits.

Random staining shall be limited to no more than 33 percent of each 58 sq cm (9 sq in.) of surface area. Allowable staining 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."

At the Contractor's option, Near White Metal Blast Cleaning may be substituted for Power Tool Cleaning – Commercial Grade, as long as containment systems appropriate for abrasive blast cleaning are utilized and there is no additional cost to the Department.

- d) Power Tool Cleaning – Modified SP3: This surface preparation shall be accomplished according to the requirements of SSPC-SP3, Power Tool Cleaning except as modified as follows. The designated surfaces shall be cleaned with power tools. A power tool cleaned surface shall be free of all loose rust, loose mill scale, loose and peeling paint, and loose rust that is bleeding through and/or penetrating the coating. All locations of visible corrosion and rust bleed, exposed or lifting mill scale, and lifting or loose paint shall be prepared using the power tools.

Upon completion of the cleaning, rust, rust bleed, mill scale and surrounding paint are permitted to remain if they can not be lifted using a dull putty knife.

Power Tool Cleaning of Shop Primed Steel. When steel coated with only a prime coat of inorganic or organic zinc is specified to be cleaned, this work shall be accomplished as follows.

After cleaning the surface as specified under "Water Cleaning of Non-Lead Coatings Prior to Overcoating," damaged and rusted areas shall be spot cleaned according Power Tool Cleaning -Modified SSPC-SP3. The edges of the coating surrounding the spot repairs shall be feathered.

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. 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 reblast cleaned at the Contractor's 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 (1.5 to 3.5 mils). If the profile requirements of the coating 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 surface profile for the Power Tool Cleaning - Commercial Grade shall be within the range specified by the coating manufacturer, but not less than 50 microns (2.0 mils).

The surface profile produced by the Contractor's surface preparation procedures shall be determined by replica tape and spring micrometer at the beginning of the work, and each day that surface preparation is performed. Areas having unacceptable measurements shall be further tested to determine the limits of the deficient area. The replica tape shall be attached to the daily report.

When unacceptable profiles are produced, work shall be suspended. The Contractor shall submit a plan for the necessary adjustments to insure that the correct surface profile is achieved 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 coating 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 recleaning, or by utilizing blends of fine and coarse abrasives during blast cleaning, wet abrasive/water jetting 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) 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 5 tests per 93 sq m (1000 sq ft) or fraction thereof completed in a given day, 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. If acceptable results are achieved on three consecutive days in which testing is conducted, the test frequency may be reduced to 1 test per 93 sq m (1000 sq ft) 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 5 tests per 93 sq m (1000 sq ft).

Following successful chloride testing the chloride test areas shall be cleaned. Commercial Grade Power Tool Cleaning can be used to clean the test locations when the specified degree of cleaning is SSPC-SP10.

Surface Condition Prior to Painting (HOLD POINT). Prepared surfaces, shall meet the requirements of the respective degrees of cleaning immediately prior to painting, and shall be painted before rusting appears on the surface. If rust appears or bare steel remains unpainted for more than 12 hours, the affected area shall be prepared again at the expense of the Contractor.

All 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 painting. 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 painting. 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.

General Paint Requirements. Paint storage, mixing, and application shall be accomplished according to these specifications and as specified in the paint manufacturer's written instructions and product data sheets for the paint system used. In the event of a conflict between these specifications and the coating manufacturers' instructions and data sheets, the Contractor shall advise the Engineer and comply with the Engineer's written resolution. Until a resolution is provided, the most restrictive conditions shall apply.

Unless noted otherwise, If a new concrete deck or repair to an existing deck is required, painting shall be done after the deck is placed and the forms have been removed.

- a) **Paint Storage and Mixing.** All Paint shall be stored according to the manufacturer's published instructions, including handling, temperatures, and warming as required prior to mixing. All coatings shall be supplied in sealed containers bearing the manufacturers name, product designation, batch number and mixing/thinning instructions. Leaking containers shall not be used.

Mixing shall be according to the manufacturer's instructions. Thinning shall be performed using thinner provided by the manufacturer, and only to the extent allowed by the manufacturer's written instructions. In no case shall thinning be permitted that would cause the coating to exceed the local Volatile Organic Compound (VOC) emission restrictions. For multiple component paints, only complete kits shall be mixed and used. Partial mixing is not allowed.

The ingredients in the containers of paint shall be thoroughly mixed by mechanical power mixers according to the manufacturer's instructions, in the original containers before use or mixing with other containers of paint. The paint shall be mixed in a manner that will break up all lumps, completely disperse pigment and result in a uniform composition. Paint shall be carefully examined after mixing for uniformity and to verify that no unmixed pigment remains on the bottom of the container. Excessive skinning or partial hardening due to improper or prolonged storage will be cause for rejection of the paint, even though it may have been previously inspected and accepted.

Multiple component coatings shall be discarded after the expiration of the pot life. Single component paint shall not remain in spray pots, painters buckets, etc. overnight. It shall be stored in a covered container and remixed before use.

The Engineer reserves the right to sample field paint (individual components and/or the mixed material) and have it analyzed. If the paint does not meet the product requirements due to excessive thinning or because of other field problems, the coating shall be removed from that section of the structure and replaced as directed by the Engineer.

- b) **Application Methods.** Unless prohibited by the coating manufacturer's written instructions, paint may be applied by spray methods, rollers, or brushes. If applied with conventional or airless spray methods, paint shall be applied in a uniform layer with overlapping at the edges of the spray pattern.

The painters shall monitor the wet film thickness of each coat during application. The wet film thickness shall be calculated based on the solids by volume of the material and the amount of thinner added. When the new coating is applied over an existing system, routine QC inspections of the wet film thickness shall be performed in addition to the painter's checks in order to establish that a proper film build is being applied.

When brushes or rollers are used to apply the coating, additional applications may be required to achieve the specified thickness per layer.

- c) **Painting Shop Primed Steel.** After cleaning, rusted and damaged areas shall be touched up using the same primer specified for painting the existing structure. The intermediate and finish coats specified for painting the existing structure shall be applied to the steel.

When inorganic zinc has been used as the shop primer, a mist coat of the intermediate coat shall be applied first in order to prevent pinholing and bubbling.

- d) Recoating and Film Continuity (HOLD POINT for each coat). Paint shall be considered dry for recoating according to the time/temperature/humidity criteria provided in the manufacturer's instructions and when an additional coat can be applied without the development of film irregularities; such as lifting, wrinkling, or loss of adhesion of the under coat. If surfaces are contaminated, washing shall be accomplished prior to intermediate and final coats. Wash water does not have to be collected unless the water contacts existing lead containing coatings.

Painting shall be done in a neat and workmanlike manner. Each coat of paint shall be applied as a continuous film of uniform thickness free of defects including, but not limited to, runs, sags, overspray, dryspray, pinholes, voids, skips, misses, and shadow-through. Defects such as runs and sags shall be brushed out immediately during application.

Paint Systems. The paint system(s) from the list below shall be applied as specified.

The paint manufacturer's relative humidity, dew point, and material, surface, and ambient temperature restrictions shall be provided with the submittals and shall be strictly followed. Written recommendations from the paint manufacturer for the length of time each coat must be protected from cold or inclement weather (e.g., exposure to rain), during the drying period shall be included in the submittals. Upon acceptance by the Engineer, these times shall be used to govern the duration that protection must be maintained during drying.

Where stripe coats are indicated, the Contractor shall apply an additional coat to edges, rivets, bolts, crevices, welds, and similar surface irregularities. The stripe coat shall be applied by brush and/or spray to thoroughly work the coating into or on the irregular surfaces, and shall extend onto the surrounding steel a minimum of 25 mm (1 in.) in all directions. The purpose of the stripe coat is to build additional thickness and to assure complete coverage of these areas.

The stripe coat may be applied as part of the application of the full coat unless prohibited by the coating manufacturer. If applied as part of the application process of the full coat, the stripe coat shall be allowed to dry for a minimum of 10 minutes in order to allow Contractor QC personnel to verify that the coat was applied. If a wet-on-wet stripe coat is prohibited by the coating manufacturer or brush or roller application of the full coat pulls the underlying stripe coat, the stripe coat shall dry according to the manufacturers' recommended drying times prior to the application of the full coat. In the case of the prime coat, the full coat can also be applied first to protect the steel, followed by the stripe coat after the full coat has dried.

- a) System 1 – OZ/E/U – for Bare Steel: System 1 shall consist of the application of a full coat of organic (epoxy) zinc-rich primer, a full intermediate coat of epoxy, and a full finish coat of aliphatic urethane. Stripe coats of the prime and finish coats shall be applied. The film thicknesses of the full coats shall be as follows, measured according to SSPC-PA2:
- One full coat of organic zinc-rich primer between 90 and 125 microns (3.5 and 5.0 mils) dry film thickness. The prime coat shall be tinted to a color that contrasts with the steel surface.

- One full intermediate coat of epoxy between 75 and 150 microns (3.0 and 6.0 mils) dry film thickness. The intermediate coat shall be a contrasting color to both the first coat and finish coat.
- One full finish coat of aliphatic urethane between 65 and 100 microns (2.5 and 4.0 mils) dry film thickness. Finish coat color shall be according to contract plans.

The total dry film thickness for this system, exclusive of areas receiving the stripe coats, shall be between 225 and 375 microns (9.0 and 15.0 mils).

- b) System 2 – PS/EM/U – for Overcoating an Existing System: System 2 shall consist of the application of a full coat of epoxy penetrating sealer, a spot intermediate coat of aluminum epoxy mastic and a stripe and full finish coat of aliphatic urethane.

A full coat of epoxy penetrating sealer shall be applied to all surfaces following surface preparation. A spot intermediate coat shall consist of the application of one coat of the aluminum epoxy mastic on all areas where rust is evident and areas where the old paint has been removed, feathered and/or damaged prior to, during or after the cleaning and surface preparation operations. After the spot intermediate, a stripe coat and full finish coat of aliphatic urethane shall be applied. The film thicknesses shall be as follows, measured according to SSPC-PA2:

- One full coat of epoxy penetrating sealer between 25 and 50 microns (1.0 and 2.0 mils) dry film thickness.
- One spot coat of aluminum epoxy mastic between 125 and 175 microns (5.0 and 7.0 mils) dry film thickness. The color shall contrast with the finish coat.
- One full finish coat of aliphatic urethane between 65 and 100 microns (2.5 and 4.0 mils) dry film thickness. Finish coat color shall be according to contract plans.

The total dry film thickness for this system, exclusive of the stripe coat, shall be between 215 and 325 microns (8.5 and 13.0 mils). The existing coating thickness to remain under the overcoat must be verified in order to obtain accurate total dry film thickness measurements.

- c) System 3 – EM/EM/AC – for Bare Steel: System 3 shall consist of the application of two full coats of aluminum epoxy mastic and a full finish coat of waterborne acrylic. Stripe coats for first coat of epoxy mastic and the finish coat shall be applied. The film thicknesses of the full coats shall be as follows, measured according to SSPC-PA2:

- One full coat of aluminum epoxy mastic between 125 and 175 microns (5.0 and 7.0 mils) dry film thickness. The first coat of aluminum epoxy mastic shall be tinted a contrasting color with the blast cleaned surface and the second coat.
- One full intermediate coat of aluminum epoxy mastic between 125 and 175 microns (5.0 and 7.0 mils) dry film thickness. The intermediate coat shall be a contrasting color to the first coat and the finish coat.

- A full finish coat of waterborne acrylic between 50 and 100 microns (2.0 and 4.0 mils) dry film thickness. Finish coat color shall be according to contract plans.

The total dry film thickness for this system, exclusive of areas receiving the stripe coats, shall be between 360 and 450 microns (12.0 and 18.0 mils).

- d) System 4 – PS/EM/AC – for Overcoating an Existing System: System 4 shall consist of the application of a full coat of epoxy penetrating sealer, a spot intermediate coat of aluminum epoxy mastic and a stripe and full finish coat of waterborne acrylic.

A full coat of epoxy penetrating sealer shall be applied to all surfaces following surface preparation. A spot intermediate coat shall consist of the application of one coat of the aluminum epoxy mastic on all areas where rust is evident and areas where the old paint has been removed, feathered and/or damaged prior to, during or after the cleaning and surface preparation operations. After the spot intermediate, a stripe coat and full finish coat of waterborne acrylic shall be applied. The film thicknesses shall be as follows, measured according to SSPC-PA2:

- One full coat of epoxy penetrating sealer between 25 and 50 microns (1.0 and 2.0 mils) dry film thickness.
- One spot coat of aluminum epoxy mastic between 125 and 175 microns (5.0 and 7.0 mils) dry film thickness. The color shall contrast with the finish coat.
- One full finish coat of waterborne acrylic between 50 and 100 microns (2.0 and 4.0 mils) dry film thickness. Finish coat color shall be according to contract plans.

The total dry film thickness for this system, exclusive of the stripe coat, shall be between 200 and 325 microns (8.0 and 13.0 mils). The existing coating thickness to remain under the overcoat must be verified in order to obtain accurate total dry film thickness measurements.

- e) System 5 – MCU – for Bare Steel: System 5 shall consist of the application of a full coat of moisture cure urethane (MCU) zinc primer, a full coat of MCU intermediate, and a full coat of MCU finish. Stripe coats of the prime and finish coats shall be applied. The contractor shall comply with the manufacturer's requirements for drying times between the application of the stripe coats and the full coats. The film thicknesses of the full coats shall be as follows, measured according to SSPC-PA2:

- One full coat of MCU zinc primer between 75 and 125 microns (3.0 and 5.0 mils) dry film thickness. The prime coat shall be tinted to a color that contrasts with the steel surface.
- One full MCU intermediate coat between 75 and 100 microns (3.0 and 4.0 mils) dry film thickness. The intermediate coat shall be a contrasting color to both the first coat and finish coat.

- One full MCU finish coat between 50 and 100 microns (2.0 and 4.0 mils) dry film thickness. Finish coat color shall be according to contract plans.

The total dry film thickness for this system, exclusive of areas receiving the stripe coats, shall be between 200 and 325 microns (8.0 and 13.0 mils).

- f) System 6 – MCU – for Overcoating an Existing System: System 6 shall consist of the application of a full coat of moisture cure urethane (MCU) penetrating sealer, a spot coat of MCU intermediate, and a stripe and full coat of MCU finish.

A full coat of MCU penetrating sealer shall be applied to all surfaces following surface preparation. A spot intermediate coat shall consist of the application of one coat of MCU intermediate on all areas where rust is evident and areas where the old paint has been removed, feathered and/or damaged prior to, during or after the cleaning and surface preparation operations. After the spot intermediate, a stripe coat and full coat of MCU finish shall be applied. The contractor shall comply with the manufacturer's requirements for drying time between the application of the stripe coat and the full finish coat. The film thicknesses shall be as follows, measured according to SSPC-PA2:

- One full coat of MCU sealer between 25 and 50 microns (1.0 and 2.0 mils) dry film thickness.
- One full MCU intermediate coat between 75 and 100 microns (3.0 and 4.0 mils) dry film thickness. The color shall contrast with the finish coat.
- One full MCU finish coat 50 and 100 microns (2.0 and 4.0 mils) dry film thickness. Finish coat color shall be according to contract plans.

The total dry film thickness for this system, exclusive of areas receiving the stripe coats, shall be between 150 and 250 microns (6.0 and 10.0 mils). The existing coating thickness to remain under the overcoat must be verified in order to obtain accurate total dry film thickness measurements.

Repair of Damage to New Coating System and Areas Concealed by Containment. The Contractor shall repair all damage to the newly installed 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 and the original preparation involved abrasive blast cleaning, the damaged areas shall be prepared to Power Tool Cleaning - Commercial Grade. If the original preparation was other than blast cleaning or the damage does not extend to the substrate, the loose, fractured paint shall be cleaned to Power Tool Cleaning – Modified SP3.

The surrounding coating at each repair location shall be feathered for a minimum distance of 40 mm (1 1/2 in.) to achieve a smooth transition between the prepared areas and the existing coating.

If the bare steel is exposed, all coats shall be applied to the prepared area. If only the intermediate and finish coats are damaged, the intermediate and finish shall be applied. If only the finish coat is damaged, the finish shall be applied.

Special Instructions.

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

The stencil shall contain the following wording "PAINTED BY (insert the name of the Contractor)" and shall show the month and year in which the painting was completed, followed by the appropriate code for the coating material applied, all stenciled on successive lines:

CODE U (for field applied System 3 or System 4).

CODE Z (for field applied System 1 or System 2).

CODE AA (for field applied System 5 or System 6).

This information shall be stenciled on the cover plate of a truss end post near the top of the railing, or 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) All surfaces painted inadvertently shall be cleaned immediately.

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 CLEANING AND PAINTING STEEL BRIDGE, at the designated location, or for CLEANING AND PAINTING the structure or portions thereof described. Payment will not be authorized until all requirements for surface preparation and painting have been fulfilled as described in this specification, including the preparation and submittal of all QC documentation. Payment will also not be authorized for non-conforming work until the discrepancy is resolved in writing.

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 4214, Standard Test Method for Evaluating Degree of Chalking of Exterior Paint Films
- 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 3, Power Tool 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 Waterjetting Prior to Recoating
- SSPC-SP15, Commercial Grade Power Tool Cleaning
- SSPC-VIS 1, Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning
- SSPC-VIS 3, Visual Standard for Power- and Hand-Tool Cleaned Steel
- 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
- The paint manufacturer's application instructions, MSDS and product data sheets

CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES

Effective: October 2, 2001

Revised: August 18, 2004

Description. This work shall consist of the containment, collection, temporary storage, transportation and disposal of waste from 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, salts, and water used for cleaning the surface of existing lead coatings prior to overcoating.

General. The existing coatings contain lead and may also contain other toxic metals. This specification provides the requirements for containment and for the protection of the public, and the environment from exposure to harmful levels of toxic metals that may be present in the paint being removed or repaired. The Contractor shall take reasonable and appropriate precautions to protect the public from the inhalation or ingestion of dust or debris from the 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. The Contractor shall also maintain on site, copies of the standards and regulations referenced herein (list provided in appendix 1).

Containment Plans. The containment plans shall include drawings, equipment specifications, and calculations (wind load, air flow and ventilation when negative pressure is specified). 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.

When required by the contract plans, the 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.

Environmental Monitoring Plan. The Environmental Monitoring Plan shall address the visual inspections and clean up of the soil and water that the Contractor will perform, including final project inspection and cleanup. The plan shall address the daily visible emissions observations that will be performed and the corrective action that will be implemented in the event emissions or releases occur. Provisions for high volume ambient air monitoring, the Quality Assurance (QA) monitoring plan, laboratory analysis and reporting shall be provided together with the name and qualifications of the laboratory that is proposed for Total Suspended Particulate (TSP)-lead analysis.

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. If the use of abrasive additives is proposed, provide the name of the additive, the premixed ratio of additive to abrasive being provided by the supplier, and a letter from the supplier of the additive indicating IEPA acceptance of the material. Note that the use of any steel or iron based material, such as but not limited to grit, shot, fines, or filings as an abrasive additive is prohibited.

Contingency Plan. The Contractor shall prepare a contingency plan for emergencies including fire, accident, failure of power, failure of dust collection system, failure of supplied air system or any other event that may require modification of standard operating procedures during lead removal. 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. The Contractor shall use the IDOT Environmental Daily Report form supplied by the Engineer to record the results of the inspections. 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:

- 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.
- Set up, calibration, operation, and maintenance of the regulated area and high volume ambient air monitoring equipment, including proper shipment of cassettes/filters to the laboratory for analysis. Included is verification that the Engineer receives the results within the time frames specified and that appropriate steps are taken to correct work practices or containment in the event of unacceptable results.
- 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.

The personnel providing the QC inspections shall be SSPC-C3 certified or equal and shall provide evidence of successful completion of 2 projects of similar or greater complexity and scope that have been completed in the last 2 years. References shall include the name, address, and telephone number of a contact person employed by the bridge owner.

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 64 kph (40 mph) 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 the use of negative pressure and airflow inside containment is specified, the Contractor shall provide all ventilation calculations and details on the equipment that will be used for achieving the specified airflow and dust collection.

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, and for providing ample ventilation to control worker and environmental exposures. 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 maintain the work area free of visible emissions of dust and debris according to all provisions of this Specification, with no debris permitted outside of the regulated area.
- The containment systems shall comply with the specified SSPC Guide 6 classifications as presented in Table 1 for the method of paint removal utilized.
- TSP-lead in the air at monitoring locations selected by the Engineer shall comply with the requirements specified herein.

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.

In addition to complying with the specific containment requirements in Table 1 for each method of removal, the Contractor shall provide and maintain coverage over the ground in the areas to be cleaned. This coverage shall be capable of catching and containing surface preparation media, paint chips, and paint dust in the event of an accidental escape from the primary containment. The containment materials shall be cleaned of loose material prior to relocation or dismantling. Acceptable methods of cleaning include blowing down the surfaces with compressed air while the ventilation system is in operation, HEPA vacuuming, and/or wet wiping. If paint chips or dust is observed escaping from the containment materials during moving, all associated operations shall be halted and the materials and components recleaned.

The containment systems shall also meet the following requirements:

- a) Dry Abrasive Blast Cleaning - Full Containment with Negative Pressure (SSPC Class 1A)

The enclosure shall be designed, installed, and maintained to sustain maximum anticipated wind forces, including negative pressure. Flapping edges of containment materials are prohibited and the integrity of all containment materials, seams, and seals shall be maintained for the duration of the project. Airflow inside containment shall be designed to provide visibility and reduce worker exposures to toxic metals according to OSHA regulations and as specified in Table 1 and its accompanying text. When the location of the work on the bridge, or over lane closures permit, the blast enclosure shall extend a minimum of 1 m (3 ft) 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. The blast enclosure shall have an entrance chamber to allow entrance and exit from the enclosure without allowing the escape of blasting residue.

If recyclable metallic abrasives are used, the Contractor shall operate the equipment in a manner that minimizes waste generation. Steps shall also be taken to minimize dust generation during the transfer of all abrasive/paint debris (expendable or recyclable abrasives) for recycling or disposal. Acceptable methods include, but are not limited to vacuuming, screw or belt conveyance systems, or manual conveyance. However manual conveyance is only permitted if the work is performed inside a containment that is equipped with an operating ventilation system capable of controlling the dust that is generated.

Appropriate filtration shall be used on the exhaust air of dust collection and abrasive recycling equipment as required to comply with IEPA regulations. The equipment shall be enclosed if visible dust and debris are being emitted and/or the regulated area or high volume monitor lead levels are not in compliance.

Areas beneath containment connection points that were shielded from abrasive blast cleaning shall be prepared by vacuum blast cleaning or vacuum-shrouded power tool cleaning after the containment is removed.

b) Vacuum Blast Cleaning within Containment (SSPC-Class 4A)

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.

The Contractor shall attach containment materials around and under the work area to catch and contain abrasive and waste materials in the event of an accidental escape from the vacuum shroud. This containment is in addition to the ground covers specified earlier.

It is possible that the close proximity of some structural steel members, such as the end diaphragms or end cross-frames underneath transverse deck expansion joints, preclude the use of the vacuum blasting equipment for the removal of the old paint. For surfaces that are inaccessible for the nozzles of the vacuum blasting equipment, the Contractor shall remove the paint by means of full containment inside a complete enclosure as directed by the Engineer.

c) Vacuum-Shrouded Power Tool Cleaning within Containment (SSPC-Class 3P)

The Contractor shall utilize power tools equipped with vacuums and High Efficiency Particulate Air (HEPA) filters. The Contractor shall attach containment walls around the work area, and install containment materials beneath the work area to catch and contain waste materials in the event of an accidental escape from the vacuum shroud. This containment is in addition to the ground covers specified earlier and shall be installed within 3m (10 ft) of the areas being cleaned.

d) Power Tool Cleaning without Vacuum, within Containment (SSPC-Class 2P)

When the use of power tools without vacuum attachments is authorized by the Engineer, the Contractor shall securely install containment walls and flooring around the work area to capture and collect all debris that is generated. The containment material requirements for this Class 2P are similar to Class 3P used for vacuum-shrouded tools, but the supporting structure will be more substantial in Class 2P to better secure the containment materials from excessive movement that could lead to the loss of waste paint chips and debris. Containment beneath the work shall be within 3m (10ft) of the areas being cleaned, and is in addition to the ground covers specified earlier.

Water Washing, Water Jetting or Wet Abrasive Blast Cleaning within Containment (SSPC Class 2W-3W)

Water washing of the bridge for the purpose of removing chalk, dirt, grease, oil, bird nests, and other surface debris, and 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 and contain all water and waste materials. The containment shall consist of impermeable floors and lower walls to prevent the water and debris from escaping. Permeable upper walls and ceilings are acceptable provided the paint chips, debris, and water, other than mists, are collected. A fine mist passing through the permeable upper walls is acceptable, provided the environmental controls specified below are met. If paint chips, debris, or water, other than mists, escape the containment system, impermeable walls and ceilings shall be installed.

When water is used for surface cleaning, the collected water shall be filtered to separate the particulate from the water. Recycling of the water is preferred in order to reduce the volume of waste that is generated. The water after filtration shall be collected and disposed of according to the waste handling portions of this specification.

When a slurry is created by injecting water into the abrasive blast stream, the slurry need not be filtered to separate water from the particulate.

Environmental Controls and Monitoring. The Contractor shall prepare and submit to the Engineer for review and acceptance, an Environmental Monitoring Plan. The purpose of the plan is to address the observations and equipment monitoring undertaken by the Contractor to confirm that project dust and debris are not escaping the containment into the surrounding air, soil, and water.

- a) **Soil and Water.** Containment systems shall be maintained to prevent the escape of paint chips, abrasives, and other debris into the water, and onto the ground, soil, slope protection, and pavements. Releases or spills of, paint chips, abrasives, dust and debris that have become deposited on surrounding property, structures, equipment or vehicles, and bodies of water are unacceptable. If there are inadvertent spills or releases, the Contractor shall immediately shut down the emissions-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.

Water booms, boats with skimmers, or other means as necessary shall be used to capture and remove paint chips or project debris that falls or escapes into the water.

At the end of each workday at a minimum, the work area outside of containment, including ground tarpaulins, shall be inspected to verify that paint debris is not present. If debris is observed, it shall be removed by hand and HEPA-vacuuming. If wet methods of preparation are used, the damp debris can remain overnight provided it is protected from accidental release by securely covering the waste, folding the waste into the ground tarps, or by other acceptable methods. Prior to commencing work the next day, the debris shall be removed.

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.** The Contractor shall conduct observations of visible emissions and releases on an ongoing daily basis when dust-producing activities are underway, such as paint removal, clean up, waste handling, and containment dismantling or relocation. Note that visible emissions observations do not apply to the fine mist that may escape through permeable containment materials when wet methods of preparation are used.

Visible emissions in excess of SSPC Guide 6, Level 1 (1% of the workday) are unacceptable. In an 8-hour workday, this equates to emissions of a cumulative duration no greater than 4.8 minutes (288 seconds). This criterion applies to scattered, random emissions of short duration. Sustained emissions from a given location (e.g., 1 minute or longer), regardless of the total length of emissions for the workday, are unacceptable and action shall be initiated to halt the emission.

If unacceptable visible emissions or releases 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.

- c) **Ambient Air Monitoring.** The Contractor shall collect and analyze air samples to evaluate levels of TSP-lead if there are sensitive receptors within 5 times the height of the structure or within 305 m (1000 ft) of the structure, whichever is greater. If sensitive receptors are not located within these limits, monitoring is not required. Sensitive receptors are areas of

public presence or access including, but not limited to, homes, schools, parks, playgrounds, shopping areas, livestock areas, and businesses. The motoring public is not considered to be a sensitive receptor for the purpose of ambient air monitoring. The monitoring schedule shall be as follows:

- For dry abrasive blast cleaning monitoring shall be conducted full time during all days of dust-producing operations (e.g., paint removal, waste handling, containment movement, etc.).
- For wet abrasive blast cleaning, water jetting, or power tool cleaning, monitoring shall be conducted for the first 5 days of dust producing operations. If the results after 5 days are acceptable, monitoring may be discontinued. If the results are unacceptable, corrective action shall be initiated to correct the cause of the emissions, and monitoring shall continue for an additional 5 days. If the results are still unacceptable, the Engineer may direct that the monitoring continue full time.
- When monitoring is discontinued, if visible emissions are observed and/or the Contractor's containment system changes during the course of the project, then air monitoring will again be required for a minimum of two consecutive days until compliance is shown.

All ambient air monitoring shall be performed by the Contractor according to the accepted QA Monitoring Plan and according to EPA regulations 40 CFR Part 50 Appendix B, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method), and 40 CFR Part 50 Appendix G, Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air.

The Contractor shall provide up to 4 monitors per work site and all necessary calibration and support equipment, power to operate them, security (or arrangements to remove and replace the monitors daily), filters, flow chart recorders and overnight envelopes for shipping the filters to the laboratory. The number of monitors required will be indicated in the General Notes. The Contractor shall also contract with a laboratory acceptable to the Engineer for the analysis. The laboratory performing the filter analysis shall be a laboratory that is accredited under the American Industrial Hygiene Association (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP) for metals analysis and under the EPA National Lead Laboratory Accreditation Program (NLLAP).

The Contractor shall locate the monitors in areas of public exposure and in areas that will capture the maximum pollutant emissions resulting from the work. The Contractor shall identify the recommended monitoring sites in the Environmental Monitoring Plan. The monitors shall not be sited until the Engineer accepts the proposed locations.

Background samples shall be collected for three days prior to the start of work while no paint disturbance operations are underway. The background monitoring shall include two weekdays and one weekend day. The background monitoring shall coincide with the anticipated working hours for the paint removal operations, but shall last for a minimum of 8 hours each day.

The filters shall be removed and replaced with new ones daily. The Contractor shall advise the Engineer in advance when the filters will be removed and replaced. Each day for the first 5 days of monitoring, the Contractor shall send the filters together with chart recorders (to record the volume of air and the run time of the monitor) in an overnight service envelope to the laboratory for analysis. At the discretion of the Engineer, if the initial 5 days of monitoring on full time monitoring projects is acceptable, the filters may be sent to the laboratory every 3 days rather than every day.

TSP-lead results at each monitor location shall be less than 1.5 $\mu\text{g}/\text{cu m}$ per calendar quarter converted to a daily allowance using the formulas from SSPC Guide 6 as follows, except that the maximum 24-hour daily allowance shall be no greater than 6 $\mu\text{g}/\text{cu m}$.

The formula for determining a 24-hour daily value based on the actual number of paint disturbance days expected to occur during the 90-day quarter is:

$$DA = (90 \div PD) \times 1.5 \mu\text{g}/\text{cu m}, \text{ where}$$

DA is the daily allowance, and

PD is the number of preparation days anticipated in the 90-day period

If the DA calculation is $> 6.0 \mu\text{g}/\text{cu m}$, use $6.0 \mu\text{g}/\text{cu m}$.

The formula for converting the 24-hour daily allowance to an adjusted daily allowance based on the length of the work shift each day (assuming that there are no lead emissions during the remaining non-working hours of the day) is:

$$ADA = DA (24 \div H), \text{ where}$$

ADA is the adjusted daily allowance,

DA is the daily allowance, and

H is the number of hours worked in 24 hours

If the ADA calculation is $> 15.0 \mu\text{g}/\text{cu m}$, use $15.0 \mu\text{g}/\text{cu m}$

The Contractor shall calibrate the monitors according to the manufacturer's written instructions upon mobilization to the site and quarterly. Each monitor shall be tagged with the calibration date, and calibration information shall be provided to the Engineer upon request.

The laboratory results shall be delivered to the Engineer within 7 days of shipping the filters to the laboratory. The report shall include:

1. Monitor identification, location
2. Cleaning location
3. Volume of air sampled
4. Sample period
5. Sample results expressed in terms of applicable standards i.e. micrograms per cubic meter on a 24 hour time weighted average, or as an adjusted daily allowance.
6. Comparison of the results with the acceptance criteria indicating whether the emissions are compliant.

Regulated Areas. Physically demarcated regulated area(s) shall be established around exposure producing operations at the OSHA Action Level for the toxic metal(s) present in the coating. The Contractor shall provide all required protective clothing and equipment for personnel entering into a regulated area. Unprotected street clothing is not permitted within the regulated areas.

Hygiene Facilities/Protective Clothing/Blood Tests. The Contractor shall provide clean lavatory and hand washing facilities according to OSHA regulations and confirm that employees wash hands, forearms, and face before breaks. The facilities shall be located at the perimeter of the regulated area in close proximity to the paint removal operation. Shower facilities shall be provided when workers' exposures exceed the Permissible Exposure Limit. Showers shall be located at each bridge site, or if allowed by OSHA regulations, at a central location to service multiple bridges. The shower and wash facilities shall be cleaned at least daily during use.

All wash and shower water shall be filtered and containerized. The Contractor is responsible for filtration, testing, and disposal of the water.

The Contractor shall make available to all IDOT project personnel a base line and post project blood level screening determined by the whole blood lead method, utilizing the Vena-Puncture technique. This screening shall be made available every 2 months for the first 6 months, and every 6 months thereafter.

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.

All handwash and shower facilities shall be fully available for use by IDOT project personnel.

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 lead paint removal and initiate clean up activities.

- Airborne lead levels at any of the high volume ambient air monitoring locations that exceed the limits in this specification, or airborne lead in excess of the OSHA Action Level at the boundary of the regulated area.
- Break in containment barriers.
- Visible emissions in excess of the specification tolerances.

- Loss of negative air pressure when negative air pressure is specified (e.g., for dry abrasive blast cleaning).
- 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 dust collection system, failure of supplied air system or any other event that may require modification of standard operating procedures during lead removal. 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 on clean side of personnel decontamination area.

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 208 L (55 gal) drum, a 19 L (5 gal) 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. The Contractor and the Department are considered to be co-generators of the waste.

The Contractor is responsible for all aspects of waste collection, testing and identification, handling, storage, transportation, and disposal according to these specifications and all applicable Federal, State, and Local regulations. The Contractor shall provide for Engineer review and acceptance a Waste Management Plan that addresses all aspects of waste handling, storage, and testing, and provides the names, addresses, and a contact person for the proposed licensed waste haulers and disposal facilities. The Department will not perform any functions relating to the waste other than provide EPA identification numbers, provide the Contractor with the emergency response information, the emergency response telephone number required to be provided on the manifest, and to sign the waste manifest. The Engineer will obtain the identification numbers from the state and federal environmental protection agencies for the bridge(s) to be painted and furnish those to the Contractor.

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., securing the lids or covers of waste containers and roll-off boxes). Waste shall not be stored outside of the containers. Waste shall be collected and transferred to bulk containers taking extra precautions as necessary to prevent the suspension of residues in air or contamination of surrounding surfaces. Precautions may include the transfer of the material within a tarpaulin enclosure. Transfer into roll-off boxes shall be planned to minimize the need for workers to enter the roll-off box.

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 all-weather containers shall meet the requirements for the transportation of hazardous materials and as approved by the Department. Acceptable containers include covered roll-off boxes and 55-gallon drums (17H). The Contractor shall insure that no breaks and no deterioration of these containers occurs and shall maintain a written log of weekly inspections of the condition of the containers. A copy of the log shall be furnished to the Engineer upon request. The containers shall be kept closed and sealed from moisture except during the addition of waste. Each container shall be permanently identified with the date that waste was placed into the container, contract number, hazardous waste name and ID number, and other information required by the IEPA.

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 Lead Paint Cleaning Residues." Copies of the test results shall be provided to the Engineer prior to shipping the waste.

Waste water generated from bridge washing, hygiene purposes, and cleaning of equipment shall be filtered on site to remove particulate and disposed of at a Publicly Owned Treatment Works (POTW) according to State regulations. The Contractor shall provide the Engineer with a letter from the POTW indicating that they will accept the waste water. If the POTW allows the filtered water to be placed into the sanitary sewer system, the Contractor shall provide a letter from the POTW indicating that based on the test results of the water, disposal in the sanitary sewer is acceptable to them. Water shall not be disposed of until the above letter(s) are provided to, and accepted by, the Engineer.

If approved abrasive additives are used that render the waste 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.

When paint is removed from the bridge without the use of abrasive additives, the paint, together with the surface preparation media (e.g. abrasive) shall be handled as a hazardous waste, regardless of the TCLP results. The waste shall be transported by a licensed hazardous waste transporter, treated by an IEPA permitted treatment facility to a non-hazardous special waste and disposed of at an IEPA permitted disposal facility in Illinois.

The treatment/disposal facilities shall be approved by the Engineer, and shall hold an IEPA permit for waste disposal and waste stream authorization for this cleaning residue. The IEPA permit and waste stream authorization must be obtained prior to beginning cleaning, except that if necessary, limited paint removal will be permitted in order to obtain samples of the waste for the disposal facilities. The waste shall be shipped to the 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.

The Contractor shall submit a waste accumulation inventory table to the Engineer no later than the 5th day of the month. The table shall show the number and size of waste containers filled each day in the preceding month and the amount of waste shipped that month, including the dates of shipments.

The Contractor shall prepare a manifest supplied by the IEPA for off-site treatment and disposal before transporting the hazardous waste off-site. The Contractor shall prepare a land ban notification for the waste to be furnished to the disposal facility. The Contractor shall obtain the handwritten signature of the initial transporter and date of the acceptance of the manifest. The Contractor shall send one copy of the manifest to the IEPA within two working days of transporting the waste off-site. The Contractor shall furnish the generator copy of the manifest and a copy of the land ban notification to the Engineer. The Contractor shall give the transporter the remaining copies of the manifest.

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.

Contractor personnel shall be trained in the proper handling of hazardous waste, and the necessary notification and clean up requirements in the event of a spill. The Contractor shall maintain a copy of the personnel training records at each bridge site.

Basis of Payment. The soil, water, and air monitoring, 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 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 preparation and submittal of all QC documentation, submittal of environmental monitoring and waste test results, and disposal of all waste.

Appendix 1 – Reference List

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

- Illinois Environmental Protection Agency – Information Statement on the Removal of Lead-Based Paint from Exterior Surfaces, latest revision
- Illinois Environmental Protection Act
- SSPC Guide 6, Guide for Containing Debris Generated During Paint Removal Operations
- 29 CFR 1926.62, Lead in Construction
- 40 CFR Part 50, Appendix B, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method)
- 40 CFR Part 50, Appendix G, Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air
- SSPC Guide 16, Guide to Specifying and Selecting Dust Collectors
- SSPC TU-7, Conducting Ambient Air, Soil, and Water Sampling Activities During Surface Preparation and Paint Disturbance Activities.

Table 1 Containment Criteria for Removal of Paint Containing Lead and Other Toxic Metals¹					
Removal Method	SSPC Class²	Containment Material Flexibility	Containment Material Permeability³	Containment Support Structure	Containment Material Joints⁴
Hand Tool Cleaning	3P ⁶	Rigid or Flexible	Permeable or Impermeable	Minimal	Partially Sealed
Power Tool Cleaning w/ Vacuum	3P ⁶	Rigid or Flexible	Permeable or Impermeable	Minimal	Partially Sealed
Power Tool Cleaning w/o Vacuum	2P	Rigid or Flexible	Permeable or Impermeable	Rigid or Flexible	Fully or Partially Sealed
Water Jetting Wet Ab Blast Water Cleaning ⁷	2W-3W	Rigid or Flexible	Permeable and Impermeable ⁷	Rigid, Flexible, or Minimal	Fully and Partially Sealed
Abrasive Blast Cleaning	1A	Rigid or Flexible	Impermeable	Rigid or Flexible	Fully Sealed
Vacuum Blast Cleaning	4A ⁶	Rigid or Flexible	Permeable	Minimal	Partially Sealed

Table 1 (Continued) Containment Criteria for Removal of Paint Containing Lead and Other Toxic Metals¹					
Removal Method	SSPC Class²	Containment Entryway	Ventilation System Required⁵	Negative Pressure Required	Exhaust Filtration Required
Hand Tool Cleaning	3P ⁶	Overlapping or Open Seam	Natural	No	No
Power Tool Cleaning w/ Vacuum	3P ⁶	Overlapping or Open Seam	Natural	No	No
Power Tool Cleaning w/o Vacuum	2P	Overlapping or Open Seam	Natural	No	No
Water Jetting Wet Ab Blast Water Cleaning ⁷	2W-3W	Overlapping or Open Seam	Natural	No	No
Abrasive Blast Cleaning	1A	Airlock or Resealable	Mechanical	Yes	Yes
Vacuum Blast Cleaning	4A ⁶	Open Seam	Natural	No	No

Notes:

¹This 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.

²The SSPC Classification is based on SSPC Guide 6. Note that for work over water, water booms or boats with skimmers must be employed, where feasible, to contain spills or releases. Debris must be removed daily at a minimum.

³Permeability addresses both air and water as appropriate. In the case of water removal methods, the containment materials must be resistant to water. Ground covers should always be impermeable, and of sufficient strength to withstand the impact and weight of the debris and the equipment used for collection and clean-up. Ground covers must also extend beyond the containment boundary to capture escaping debris.

⁴ If debris escapes through the seams, then additional sealing of the seams and joints is required.

⁵When "Natural" is listed, ventilation is not required provided the emissions are controlled as specified in this Special Provision, and provided worker exposures are properly controlled. If unacceptable emissions or worker exposures to lead or other toxic metals occur, incorporate a ventilation system into the containment.

⁶Ground covers and wall tarpaulins may provide suitable controls over emissions without the need to completely enclose the work area.

⁷This method applies to water cleaning to remove surface contaminants, and water jetting (with and without abrasive) and wet abrasive blast cleaning where the goal is to remove paint. Although both permeable and impermeable containment materials are included, ground covers and the lower portions of the containment must be water impermeable with fully sealed joints, and of sufficient strength and integrity to facilitate the collection and holding of the water and debris for proper disposal. If water or debris, other than mist, escape through upper sidewalls or ceiling areas constructed of permeable materials, they shall be replaced with impermeable materials. Permeable materials for the purpose of this specification are defined as materials with openings measuring 25 mils or less in greatest dimension.

- A. 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 200 mm (8 in.) 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. Design the system with proper exhaust ports or plenums, adequately sized ductwork, adequately sized discharge fans and air cleaning devices (dust collectors) and properly sized and distributed make-up air points to achieve a uniform air flow inside containment for visibility. The design target for airflow shall be a minimum of 30.5m (100 ft) per minute cross-draft or 18.3 m (60 ft) per minute downdraft. Increase these minimum airflow requirements if necessary to address worker lead exposures. 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 7.5 mm (0.03 in.) 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 used, provide filtration of the exhaust air, to achieve a filtration efficiency of 99.9 percent at 0.5 microns.

HAZARDOUS WASTE
CONTINGENCY PLAN
FOR
LEAD BASED PAINT REMOVAL PROJECTS

Bridge No.: _____
Location: _____
USEPA Generator No.: _____
IEPA Generator No.: _____

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: (Describe arrangements or refusal by police to make arrangements):

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.

FLAGGER VESTS (BDE)

Effective: April 1, 2003

Revised: January 1, 2006

Revise the first sentence of Article 701.04(c)(1) of the Standard Specifications to read:

“The flagger shall be stationed to the satisfaction of the Engineer and be equipped with a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-2004 for Conspicuity Class 2 garments and approved flagger traffic control signs conforming to Standard 702001 and Article 702.05(e).”

Revise Article 701.04(c)(6) of the Standard Specifications to read:

“(6) Nighttime Flagging. Flaggers shall be illuminated by an overhead light source providing a minimum vertical illuminance of 108 lux (10 fc) measured 300 mm (1 ft) out from the flagger’s chest. The bottom of any luminaire shall be a minimum of 3 m (10 ft) above the pavement. Luminaire(s) shall be shielded to minimize glare to approaching traffic and trespass light to adjoining properties.

The flagger vest shall be a fluorescent orange or fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 3 garments.”

ORGANIC ZINC RICH PAINT SYSTEM

Effective: November 1, 2001

Revised: August 1, 2003

Add the following to Section 1008 of the Standard Specifications:

“ **1008.26 Organic Zinc-Rich Paint System.** The organic zinc-rich paint system shall consist of an organic zinc-rich primer, an epoxy or urethane intermediate coat, and aliphatic urethane finish coats. It is intended for use over blast-cleaned steel when three-coat shop applications are specified. The system is also suitable for field painting blast-cleaned existing structures.

(a) General Requirements.

(1) Compatibility. Each coating in the system shall be supplied by the same paint manufacturer.

(2) Toxicity. Each coating shall contain less than 0.01 percent lead in the dry film and no more than trace amounts of hexavalent chromium, cadmium, mercury or other toxic heavy metals.

(3) Volatile Organics. The volatile organic compounds of each coating shall not exceed 420 g/L (3.5 lb/gal) as applied.

(b) Test Panel Preparation.

(1) Substrate and Surface Preparation. Test panels shall be AASHTO M 270M, Grade 250 (M 270 Grade 36), hot-rolled steel measuring 100 mm x 150 mm (4 in. x 6 in.). Panels shall be blast-cleaned per SSPC-SP5 white metal condition using metallic abrasive. The abrasive shall be a 60/40 mix of shot and grit. The shot shall be an SAE shot number S230 and the grit an SAE number G40. Hardness of the shot and grit shall be Rockwell C45. The anchor profile shall be 40-65 microns (1.5-2.5 mils) measured according to ASTM D 4417, Method C.

(2) Application and Curing. All coatings shall be spray applied at the manufacturer's recommended film thickness. The coated panels shall be cured at least 14 days at $24\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ ($75\text{ }^{\circ}\text{F} \pm 2\text{ }^{\circ}\text{F}$) and 50 ± 5 percent relative humidity.

(3) Scribing. The test panels shall be scribed according to ASTM D 1654 with a single "X" mark centered on the panel. The rectangular dimensions of the scribe shall have a top width of 50 mm (2 in.) and a height of 100 mm (4 in.). The scribe cut shall expose the steel substrate as verified with a microscope.

(4) Number of Panels. All testing shall be performed on triplicate panels.

(c) Zinc-Rich Primer Requirements.

(1) Generic Type. This material shall be an organic zinc-rich epoxy or urethane primer. It shall be suitable for topcoating with epoxies, urethanes, and acrylics.

(2) Zinc Dust. The zinc dust pigment shall comply with ASTM D 520, Type II.

(3) Slip Coefficient. The organic zinc coating shall meet a Class B AASHTO slip coefficient (0.50 or greater) for structural steel joints using ASTM A 325M (A 325) or A 490M (A 490) bolts.

(4) Salt Fog. There shall be no delamination, blistering, rust creepage at the scribe, or rusting at the scribe edges after 5,000 hours of salt fog exposure when tested according to ASTM B 117 and evaluated according to AASHTO R 31.

(5) Cyclic Exposure. There shall be no delamination, blistering, rust creepage at the scribe, or rusting at the scribe edges after 5,000 hours of cyclic exposure when tested according to ASTM D 5894 and evaluated according to AASHTO R 31.

(6) Humidity Exposure. There shall be no delamination, blistering, rust creepage at the scribe, or rusting at the scribe edges after 4,000 hours of humidity exposure when tested according to ASTM D 2247 and evaluated according to AASHTO R 31.

(7) Adhesion. The adhesion to an abrasively blasted steel substrate shall not be less than 6200 kPa (900 psi) when tested according to ASTM D 4541 Annex A4.

(8) Freeze Thaw Stability. There shall be no reduction of adhesion, which exceeds the test precision, after 30 days of freeze/thaw/immersion testing. One 24-hour cycle shall consist of 16 hours of approximately $-30\text{ }^{\circ}\text{C}$ ($-22\text{ }^{\circ}\text{F}$) followed by 4 hours of thawing at $50\text{ }^{\circ}\text{C}$ ($122\text{ }^{\circ}\text{F}$) and 4

hours tap water immersion at 25 °C (77 °F). The test panels shall remain in the freezer on weekends and holidays.

(d) Intermediate Coat Requirements.

(1) Generic Type. This material shall be an epoxy or urethane. It shall be suitable as an intermediate coat over inorganic and organic zinc primers and compatible with acrylic, epoxy, and polyurethane topcoats.

(2) Color. The color of the intermediate coat shall be white or off-white.

(e) Urethane Finish Coat Requirements.

(1) Generic Type. This material shall be an aliphatic urethane. It shall be suitable as a topcoat over epoxies and urethanes.

(2) Color and Hiding Power. The finish coat shall match Munsell Glossy Color 7.5G 4/8 Interstate Green, 2.5YR 3/4 Reddish Brown, 10B 3/6 Blue, or 5B 7/1 Gray. The color difference shall not exceed 3.0 Hunter Delta E Units. Color difference shall be measured by instrumental comparison of the designated Munsell standard to a minimum dry film thickness of 75 microns (3 mils) of sample coating produced on a test panel according to ASTM D 823, Practice E, Hand-Held, Blade Film Application. Color measurements shall be determined on a spectrophotometer with 45 degrees circumferential/zero degrees geometry, illuminant C, and two degrees observer angle. The spectrophotometer shall measure the visible spectrum from 380-720 nanometers with a wavelength interval and spectral bandpass of 10 nanometers.

The contrast ratio of the finish coat at 75 microns (3 mils) dry film thickness shall not be less than 0.99 when tested according to ASTM D 2805.

(3) Weathering Resistance. Test panels shall be aluminum alloy measuring 300 mm x 100 mm (12 in. x 4 in.) prepared according to ASTM D 1730 Type A, Method 1 Solvent Cleaning. A minimum dry film thickness of 75 microns (3 mils) of finish coat shall be applied to three test panels according to ASTM D 823, Practice E, Hand Held Blade Film Application. The coated panels shall be cured at least 14 days at 24 °C ± 1 °C (75 °F ± 2 °F) and 50 ± 5 percent relative humidity. The panels shall be subjected to 300 hours of accelerated weathering using the light and water exposure apparatus (fluorescent UV - condensation type) as specified in ASTM G 53-96 and ASTM G 154 (equipped with UVB-313 lamps). The cycle shall consist of 8 hours UV exposure at 60 °C (140 °F) followed by 4 hours of condensation at 40 °C (104 °F). After exposure, rinse the panel with clean water; allow to dry at room temperature for one hour. The exposed panels shall not show a color change of more than 3 Hunter Delta E Units.

(f) Three Coat System Requirements.

(1) Finish Coat Color. For testing purposes, the color of the finish coat shall match Federal Standard No 595, color chip 14062 (green).

(2) Salt Fog. When tested according to ASTM B 117 and evaluated according to AASHTO R 31, the paint system shall exhibit no spontaneous delamination and not exceed the following acceptance levels after 5,000 hours of salt fog exposure:

Salt Fog Acceptance Criteria (max)			
Blister Criteria	Rust Criteria		
Size/Frequency	Maximum Creep	Average Creep	% Rusting at Scribed Edges
#8 Few	4mm	1mm	1

(3) Cyclic Exposure. When tested according to ASTM D 5894 and evaluated according to AASHTO R 31, the paint system shall exhibit no spontaneous delamination and not exceed the following acceptance levels after 5,000 hours of cyclic exposure:

Cyclic Exposure Acceptance Criteria (max)			
Blister Criteria	Rust Criteria		
Size/Frequency	Maximum Creep	Average Creep	% Rusting at Scribed Edges
#8 Few	2mm	1mm	1

(4) Humidity Exposure. There shall be no delamination, blistering, rust creepage at the scribe, or rusting at the scribe edges after 4,000 hours of humidity exposure when tested according to ASTM D 2247 and evaluated according to AASHTO R 31.

(5) Adhesion. The adhesion to an abrasively blasted steel substrate shall not be less than 6200 kPa (900 psi) when tested according to ASTM D 4541 Annex A4.

(6) Freeze Thaw Stability. There shall be no reduction of adhesion, which exceeds the test precision, after 30 days of freeze/thaw/immersion testing. One 24 hour cycle shall consist of 16 hours of approximately -30 °C (-22 °F) followed by 4 hours of thawing at 50 °C (122 °F) and 4 hours tap water immersion at 25 °C (77 °F). The test panels shall remain in the freezer mode on weekends and holidays.

(g) Qualification Samples and Tests. The manufacturer shall supply, to an independent test laboratory and to the Department, samples of the organic zinc-rich primer, epoxy or urethane intermediate coat, and aliphatic urethane finish coats for evaluation. Prior to approval and use, the manufacturer shall submit a notarized certification of the independent laboratory, together with results of all tests, stating that these materials meet the requirements as set forth herein. The certified test report shall state lots tested, manufacturer's name, product names, and dates of manufacture. New certified test results and samples for testing by the Department shall be submitted any time the manufacturing process or paint formulation is changed. All costs of testing, other than tests conducted by the Department, shall be borne by the manufacturer.

(h) Acceptance Samples and Certification. A 1 L (1 qt) sample of each lot of paint produced for use on state or local agency projects shall be submitted to the Department for testing, together with a manufacturer's certification. The certification shall state that the formulation for the lot represented is essentially identical to that used for qualification testing. All acceptance samples shall be witnessed by a representative of the Illinois Department of Transportation.

The organic zinc-rich primer, epoxy or urethane intermediate coat, and aliphatic urethane finish coats shall not be used until tests are completed and they have met the requirements as set forth herein.”

PARTIAL PAYMENTS (BDE)

Effective: September 1, 2003

Revise Article 109.07 of the Standard Specifications to read:

“**109.07 Partial Payments.** Partial payments will be made as follows:

- (a) **Progress Payments.** At least once each month, the Engineer will make a written estimate of the amount of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved. Furthermore, progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c).

- (b) **Material Allowances.** At the discretion of the Department, payment may be made for materials, prior to their use in the work, when satisfactory evidence is presented by the Contractor. Satisfactory evidence includes justification for the allowance (to expedite the work, meet project schedules, regional or national material shortages, etc.), documentation of material and transportation costs, and evidence that such material is properly stored on the project or at a secure location acceptable and accessible to the Department.

Material allowances will be considered only for nonperishable materials when the cost, including transportation, exceeds \$10,000 and such materials are not expected to be utilized within 60 days of the request for the allowance. For contracts valued under \$500,000, the minimum \$10,000 requirement may be met by combining the principal (material) product of no more than two contract items. An exception to this two item limitation may be considered for any contract regardless of value for items in which material (products) are similar except for type and/or size.

Material allowances shall not exceed the value of the contract items in which used and shall not include the cost of installation or related markups. Amounts paid by the Department for material allowances will be deducted from estimates due the Contractor as the material is used. Two-sided copies of the Contractor’s cancelled checks for materials and transportation must be furnished to the Department within 60 days of payment of the allowances or the amounts will be reclaimed by the Department.”

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000

Revised: 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.

PAYROLLS AND PAYROLL RECORDS (BDE)

Effective: August 10, 2005

FEDERAL AID CONTRACTS. Add the following State of Illinois requirements to the Federal requirements contained in Section V of Form FHWA-1273:

"The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form."

STATE CONTRACTS. Revise Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

"IV. COMPLIANCE WITH THE PREVAILING WAGE ACT

1. **Prevailing Wages.** All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the Contractor will not be allowed additional compensation on account of said revisions.
2. **Payroll Records.** The Contractor and each subcontractor shall make and keep, for a period of three years from the date of completion of this contract, records of the wages paid to his/her workers. The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid. Upon two business days' notice, these records shall be available, at all reasonable hours at a location within the State, for inspection by the Department or the Department of Labor.
3. **Submission of Payroll Records.** The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work. The submittals shall be on the Department's form SBE 48, or an

approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box (“No Work”, “Suspended”, or “Complete”) checked on the form.

Each submittal shall be accompanied by a statement signed by the Contractor or subcontractor which avers that: (i) such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required by the Act; and (iii) the Contractor or subcontractor is aware that filing a payroll record that he/she knows to be false is a Class B misdemeanor.

4. Employee Interviews. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor.”

PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: July 1, 2004

All personnel, excluding flaggers, working outside of a vehicle (car or truck) within 7.6 m (25 ft) of pavement open to traffic shall wear a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/.green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 2 garments. Other types of garments may be substituted for the vest as long as the garments have manufacturers tags identifying them as meeting the ANSI Class 2 requirement.

PORTABLE CHANGEABLE MESSAGE SIGNS (BDE)

Effective: November 1, 1993

Revised: April 2, 2004

Description. This work shall consist of furnishing, placing, and maintaining changeable message sign(s) at the location(s) shown on the plans or as directed by the Engineer.

The sign(s) shall be trailer mounted. The message panel shall be at least 2.1 m (7 ft) above the pavement, present a level appearance, and be capable of displaying up to eight characters in each of three lines at a time. Character height shall be 450 mm (18 in.).

The message panel shall be of either a bulb matrix or disc matrix design controlled by an onboard computer capable of storing a minimum of 99 programmed messages for instant recall. The computer shall be capable of being programmed to accept messages created by the operator via an alpha-numeric keyboard and able to flash any six messages in sequence. The message panel shall also be capable of being controlled by a computer from a remote location via a cellular linkage. The Contractor shall supply the modem, the cellular phone, and the necessary software to run the sign from a remote computer at a location designated by the Engineer. The Contractor shall promptly program and/or reprogram the computer to provide the messages as directed by the Engineer.

The message panel shall be visible from 400 m (1/4 mile) under both day and night conditions. The letters shall be legible from 250 m (750 ft).

The sign shall include automatic dimming for nighttime operation and a power supply capable of providing 24 hours of uninterrupted service.

The Contractor shall provide all preventive maintenance efforts s(he) deems necessary to achieve uninterrupted service. If service is interrupted for any cause and not restored within 24 hours, the Engineer will cause such work to be performed as may be necessary to provide this service. The cost of such work shall be borne by the Contractor or deducted from current or future compensation due the Contractor.

When the sign(s) are displaying messages, they shall be considered a traffic control device. At all times when no message is displayed, they shall be considered equipment.

Basis of Payment. When portable changeable message signs are shown on the Standard, this work will not be paid for separately but shall be considered as included in the cost of the Standard.

For all other portable changeable message signs, this work will be paid for at the contract unit price per calendar month for each sign as CHANGEABLE MESSAGE SIGN.

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

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

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

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

TEMPORARY CONCRETE BARRIER (BDE)

Effective: October 1, 2002

Revised: November 1, 2003

Revise Section 704 of the Standard Specifications to read:

"SECTION 704. TEMPORARY CONCRETE BARRIER

704.01 Description. This work shall consist of furnishing, placing, maintaining, relocating and removing precast concrete barrier at temporary locations as shown on the plans or as directed by the Engineer.

704.02 Materials. Materials shall meet the requirements of the following Articles of Section 1000 - Materials:

Item	Article/Section
(a) Portland Cement Concrete.....	1020
(b) Reinforcement Bars (Note 1)	1006.10(a)(b)
(c) Connecting Pins and Anchoring Pins.....	1006.09
(d) Connecting Loop Bars (Note 2)	
(e) Rapid Set Mortar (Note 3)	

Note 1. Reinforcement bars shall be Grade 400 (Grade 60).

Note 2. Connecting loop bars shall be smooth bars conforming to the requirements of ASTM A 36.

Note 3. Rapid set materials shall be obtained from the Department's approved list of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs. For a rapid set mortar mixture, one part packaged rapid set cement shall be combined with two parts fine aggregate, by volume or a packaged rapid set mortar shall be used. Mixing of the rapid set mortar shall be according to the manufacturer's instructions.

CONSTRUCTION REQUIREMENTS

704.03 General. Precast concrete barrier produced after October 1, 2002 shall meet National Cooperative Highway Research Program (NCHRP) Report 350, Category 3, Test Level 3 requirements and have the F shape. Precast concrete barrier shall be constructed according to the Bureau of Materials and Physical Research's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products", applicable portions of Sections 504 and 1020, and to the details shown on the plans.

Precast units shall not be removed from the casting beds until a flexural strength of 2,000 kPa (300 psi) or a compressive strength of 10,000 kPa (1400 psi) is attained. When the concrete has attained a compressive strength according to Article 1020.04, and not prior to four days after casting, the units may be loaded, shipped and used.

704.04 Installation. F shape barrier units shall be seated on bare, clean pavement or paved shoulder and pinned together in a smooth, continuous line at the exact locations provided by the Engineer. The barrier unit at each end of the installation shall be secured to the pavement or paved shoulder using six anchoring pins and protected with an impact attenuator as shown on the plans.

F shape and New Jersey shape barrier units shall not be mixed in the same run.

Barrier units or attachments damaged during transportation or handling, or by traffic during the life of the installation, shall be repaired or replaced by the Contractor at his/her expense. The Engineer will be the sole judge in determining which units or attachments require repair or replacement.

The temporary barriers shall be removed when no longer required by the contract. After removal, all anchoring holes in the pavement or paved shoulder shall be filled with a rapid set mortar. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.

704.05 New Jersey Shape Barrier. New Jersey shape barrier produced prior to October 1, 2002 according to earlier Department standards, may be used until January 1, 2008.

Barrier units or attachments damaged during transportation or handling, or by traffic during the life of the installation, shall be repaired or replaced by the Contractor at his/her expense. The Engineer will be the sole judge in determining which units or attachments require repair or replacement.

F shape and New Jersey shape barrier units shall not be mixed in the same run.

The barrier unit at each end of the installation shall be secured to the pavement or paved shoulder using six dowel bars and protected with an impact attenuator as shown on the plans.

The temporary barriers shall be removed when no longer required by the contract. After removal, all anchoring holes in the pavement or paved shoulder shall be filled with a rapid set mortar. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.

704.06 Method of Measurement. Temporary concrete barrier will be measured for payment in meters (feet) in place along the centerline of the barrier. When temporary concrete barrier is relocated within the limits of the jobsite, the relocated barrier will be measured for payment in meters (feet) in place along the centerline of the barrier.

704.07 Basis of Payment. When the Contractor furnishes the barrier units, this work will be paid for at the contract unit price per meter (foot) for TEMPORARY CONCRETE BARRIER or RELOCATE TEMPORARY CONCRETE BARRIER.

When the Department furnishes the barrier units, this work will be paid for at the contract unit price per meter (foot) for TEMPORARY CONCRETE BARRIER, STATE OWNED or RELOCATE TEMPORARY CONCRETE BARRIER, STATE OWNED.

Impact attenuators will be paid for separately.”

TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 1992

Revised: January 1, 2005

To ensure a prompt response to incidents involving the integrity of work zone traffic control, the Contractor shall provide a telephone number where a responsible individual can be contacted 24 hours-a-day.

When the Engineer is notified, or determines a traffic control deficiency exists, he/she will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 12 hours based upon the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge.

A deficiency may be any lack of repair, maintenance, or non-compliance with the traffic control plan. A deficiency may also be applied to situations where corrective action is not an option such as the use of non-certified flaggers for short term operations; working with lane closures beyond the time allowed in the contract; or failure to perform required contract obligations such as traffic control surveillance.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The daily monetary deduction will be either \$1,000 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option this monetary deduction will be immediate.

In addition, if the Contractor fails to respond, the Engineer may correct the deficiency and the cost thereof will be deducted from monies due or which may become due the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

WORK ZONE PUBLIC INFORMATION SIGNS (BDE)

Effective: September 1, 2002

Revised: January 1, 2005

Description. This work shall consist of furnishing, erecting, maintaining, and removing work zone public information signs.

Camera-ready artwork for the signs will be provided to sign manufacturing companies upon request by contacting the Central Bureau of Operations at 217-782-2076. The sign number is W21-I116-6048.

Freeways/Expressways. These signs are required on freeways and expressways. The signs shall be erected as shown on Highway Standard 701400 and according to Article 702.05(a) of the Standard Specifications.

All Other Routes. These signs shall be used on other routes when specified on the plans. They shall be erected in pairs midway between the first and second warning signs.

Basis of Payment. This work will not be paid for separately but shall be considered as included in the cost of the Standard.

WORK ZONE SPEED LIMIT SIGNS (BDE)

Effective: April 2, 2004

Revised: January 1, 2006

Delete Article 702.05(c).

Revise Article 702.05(d) to read:

“(d) Work Zone Speed Limit Signs. Work zone speed limit sign assemblies shall be provided and located as shown on the plans. Two additional assemblies shall be placed 150 m (500 ft) beyond the last entrance ramp for each interchange or sideroad. The individual signs that make up an assembly may be combined on a single panel. The sheeting for the signs shall be reflective and conform to the requirements of Article 1084.02.

All permanent “SPEED LIMIT” signs located within the work zone shall be removed or covered. This work shall be coordinated with the lane closure(s) by promptly establishing a reduced posted speed zone when the lane closure(s) are put into effect and promptly reinstating the posted speed zone when the lane closure(s) are removed.

The work zone speed limit signs and end work zone speed limit signs shown in advance of and at the end of the lane closure(s) shall be used for the entire duration of the closure(s).

The work zone speed limit signs shown within the lane closure(s) shall only be used when workers are present in the closed lane adjacent to traffic; at all other times, the signs shall be promptly removed or covered. The sign assemblies shown within the lane closure(s) will not be required when the worker(s) are located behind a concrete barrier wall.

WORK ZONE TRAFFIC CONTROL (BDE)

Effective: April 2, 2004

Revised: November 1, 2005

Revise Article 701.07(a) to read:

“(a) Not Measured. Traffic control and protection required under Standards 701001, 701006, 701011, 701101, 701106, 701301, 701311, 701400, and 701426 will not be measured for payment.”

Revise the first paragraph of Article 701.07(b) to read:

“(b) Standards 701401, 701422, and 701446 will be measured for payment on an each basis only when the traffic control and protection applies to isolated stationary work areas and does not involve or is not a part of other protected areas.”

Revise the Article 701.07(c) to read:

“(c) Measured As Lump Sum. Traffic control and protection required under Standards 701201, 701206, 701306, 701326, 701336, 701406, 701421, 701501, 701502, 701601, 701602, 701606, 701701 and 701801 will be measured for payment on a lump sum basis. Traffic control protection required under Standards 701401, 701422, and 701446 will be measured for payment on a lump sum basis, except as specified under Article 701.07(b). Where the Contractor's operations result in daily changing, or two or more work areas each of which requires traffic control according to one of the above Standards, each work area installation will not be paid for separately, but shall be included in the lump sum price for the type of protection furnished.”

Revise the first paragraph of Article 701.08(a) to read:

“(a) Traffic control and protection will be paid for at the contract unit price each for TRAFFIC CONTROL AND PROTECTION STANDARD 701316; TRAFFIC CONTROL AND PROTECTION STANDARD 701321; TRAFFIC CONTROL AND PROTECTION STANDARD 701331; TRAFFIC CONTROL AND PROTECTION STANDARD 701401; TRAFFIC CONTROL AND PROTECTION STANDARD 701402; TRAFFIC CONTROL AND PROTECTION STANDARD 701411; TRAFFIC CONTROL AND PROTECTION STANDARD 701416; TRAFFIC CONTROL AND PROTECTION STANDARD 701422; TRAFFIC CONTROL AND PROTECTION STANDARD 701423; TRAFFIC CONTROL AND PROTECTION STANDARD 701431; or TRAFFIC CONTROL AND PROTECTION STANDARD 701446 at the location specified.”

Revise the first paragraph of Article 701.08(b) to read:

“(b) Traffic control and protection indicated in Article 701.07(c) will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION STANDARD 701201; TRAFFIC CONTROL AND PROTECTION STANDARD 701206; TRAFFIC CONTROL AND PROTECTION STANDARD 701306; TRAFFIC CONTROL AND PROTECTION STANDARD 701326; TRAFFIC CONTROL AND PROTECTION STANDARD 701336; TRAFFIC CONTROL AND PROTECTION STANDARD 701401; TRAFFIC CONTROL AND PROTECTION STANDARD 701406; TRAFFIC CONTROL AND PROTECTION STANDARD 701421; TRAFFIC CONTROL AND PROTECTION STANDARD 701422; TRAFFIC CONTROL AND PROTECTION STANDARD 701446; TRAFFIC CONTROL AND PROTECTION STANDARD 701501; TRAFFIC CONTROL AND PROTECTION STANDARD 701502; TRAFFIC CONTROL AND PROTECTION STANDARD 701601; TRAFFIC CONTROL AND PROTECTION STANDARD 701602, TRAFFIC CONTROL AND PROTECTION STANDARD 701606; TRAFFIC CONTROL AND PROTECTION STANDARD 701701; or TRAFFIC CONTROL AND PROTECTION STANDARD 701801.”

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: January 1, 2003

Revised: November 1, 2004

Add the following to Article 702.01 of the Standard Specifications:

“All devices and combinations of devices shall meet the requirements of the National Cooperative Highway Research Program (NCHRP) Report 350 for their respective categories. The categories are as follows:

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, flexible delineators and plastic drums with no attachments. Category 1 devices shall be crash tested and accepted or may be self-certified by the manufacturer.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include drums and vertical panels with lights, barricades and portable sign supports. Category 2 devices shall be crash tested and accepted for Test Level 3.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions, truck mounted attenuators and other devices not meeting the definitions of Category 1 or 2. Category 3 devices shall be crash tested and accepted for either Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as arrow boards, changeable message signs, temporary traffic signals and area lighting supports. Currently, there is no implementation date set for this category and it is exempt from the NCHRP 350 compliance requirement.

The Contractor shall provide a manufacturer’s self-certification letter for each Category 1 device and an FHWA acceptance letter for each Category 2 and Category 3 device used on the contract. The letters shall state the device meets the NCHRP 350 requirements for its respective category and test level, and shall include a detail drawing of the device.”

Delete the third, fourth and fifth paragraphs of Article 702.03(b) of the Standard Specifications.

Delete the third sentence of the first paragraph of Article 702.03(c) of the Standard Specifications.

Revise the first sentence of the first paragraph of Article 702.03(e) of the Standard Specifications to read:

“Drums shall be nonmetallic and have alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes.”

Add the following to Article 702.03 of the Standard Specifications:

“(h) Vertical Barricades. Vertical barricades may be used in lieu of cones, drums or Type II barricades to channelize traffic.”

Delete the fourth paragraph of Article 702.05(a) of the Standard Specifications.

Revise the sixth paragraph of Article 702.05(a) of the Standard Specifications to read:

“When the work operations exceed four days, all signs shall be post mounted unless the signs are located on the pavement or define a moving or intermittent operation. When approved by the Engineer, a temporary sign stand may be used to support a sign at 1.2 m (5 ft) minimum where posts are impractical. Longitudinal dimensions shown on the plans for the placement of signs may be increased up to 30 m (100 ft) to avoid obstacles, hazards or to improve sight distance, when approved by the Engineer. “ROAD CONSTRUCTION AHEAD” signs will also be required on side roads located within the limits of the mainline “ROAD CONSTRUCTION AHEAD” signs.”

Delete all references to “Type 1A barricades” and “wing barricades” throughout Section 702 of the Standard Specifications.

IMPACT ATTENUATORS, TEMPORARY (BDE)

Effective: November 1, 2003

Revised: August 1, 2006

Description. This work shall consist of furnishing, installing, maintaining, and removing temporary impact attenuators of the category and test level specified.

Materials. Materials shall meet the requirements of the impact attenuator manufacturer and the following:

Item	Article/Section
(a) Fine Aggregate (Note 1).....	1003.01
(b) Steel Posts, Structural Shapes, and Plates	1006.04
(c) Rail Elements, End Section Plates, and Splice Plates	1006.25
(d) Bolts, Nuts, Washers and Hardware	1006.25
(e) Hollow Structural Tubing	1006.27(b)
(f) Wood Posts and Wood Blockouts.....	1007.01, 1007.02, 1007.06
(g) Preservative Treatment.....	1007.12
(h) Rapid Set Mortar (Note 2)	

Note 1. Fine aggregate shall be FA-1 or FA-2, Class A quality. The sand shall be unbagged and shall have a maximum moisture content of five percent.

Note 2. Rapid set mortar shall be obtained from the Department’s approved list of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs. For a rapid set mortar mixture, one part packaged rapid set cement shall be combined with two parts fine aggregate, by volume or a packaged rapid set mortar shall be used. Mixing of the rapid set mortar shall be according to the manufacturer’s instructions.

CONSTRUCTION REQUIREMENTS

General. Impact Attenuators shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 350 for the test level specified and shall be on the Department’s approved list.

Installation. Regrading of slopes or approaches for the installation shall be as shown on the plans.

Attenuator bases, when required by the manufacturer, shall be constructed on a prepared subgrade according to the manufacturer's specifications. The surface of the base shall be slightly sloped or crowned to facilitate drainage.

Impact attenuators shall be installed according to the manufacturer's specifications and include all necessary transitions between the impact attenuator and the item to which it is attached.

When water filled attenuators are used between November 1 and April 15, they shall contain anti-freeze according to the manufacturer's recommendations.

Markings. Sand module impact attenuators shall be striped with alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes. There shall be at least two of each stripe on each module.

Other types of impact attenuators shall have a terminal marker applied to their nose and reflectors along their sides.

Maintenance. All maintenance of the impact attenuators shall be the responsibility of the Contractor until removal is directed by the Engineer.

Relocate. When relocation of temporary impact attenuators is specified, they shall be removed, relocated and reinstalled at the new location. The reinstallation requirements shall be the same as those for a new installation.

Removal. When the Engineer determines the temporary impact attenuators are no longer required, the installation shall be dismantled with all hardware becoming the property of the Contractor.

Surplus material shall be disposed of according to Article 202.03. Anti-freeze, when present, shall be disposed of/recycled according to local ordinances.

When impact attenuators have been anchored to the pavement, the anchor holes shall be repaired with rapid set mortar. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.

Method of Measurement. This work will be measured for payment as each, where each is defined as one complete installation.

Basis of Payment. This work will be paid for at the contract unit price per each for IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW); IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, WIDE); IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, RESETTABLE); IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW); IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, WIDE); or IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) of the test level specified.

Relocation of the devices will be paid for at the contract unit price per each for IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE); IMPACT ATTENUATORS, RELOCATE (SEVERE USE); or IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE); of the test level specified.

Regrading of slopes or approaches will be paid for according to Section 202 and/or Section 204 of the Standard Specifications.

INDEX OF SHEETS

- 1. COVER SHEET, INDEX OF SHEETS, STANDARDS
- 2. SUMMARY OF QUANTITIES
- 3. LOCATION MAP
- 4. + 5. TRAFFIC CONTROL DETAILS
- 6. + 36. SN 081-0106, EXISTING BRIDGE PLANS

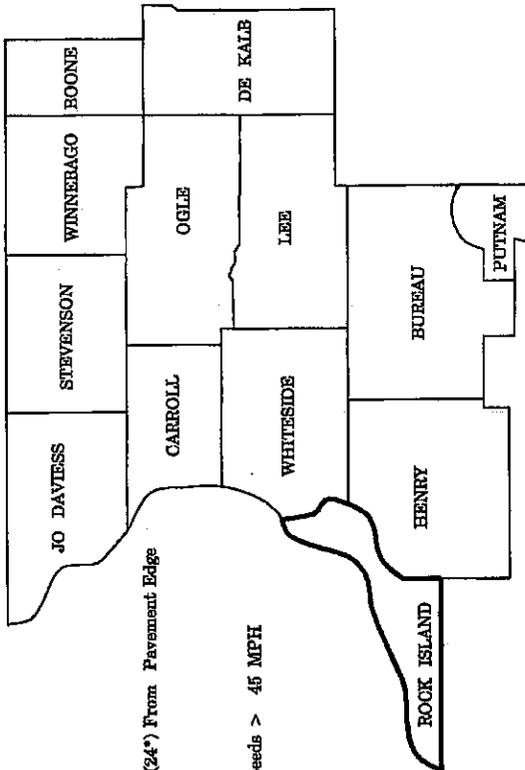
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED ROADWORK**

**FAI Route 280 (I 280)
Section (81-1B)P-2
Rock Island County**

C-92-092-05
D-92-135-00

STANDARDS

- 701101-01 Off-Road Operations, Multilane, 4.5 m (15') to 600 mm (24") From Pavement Edge
- 701400-02 Approach to Lane Closure, Freeway/Expressway
- 701402-05 Lane Closure, Freeway/Expressway, with Barrier
- 701406-04 Lane Closure, Freeway/Expressway, Day Operations Only
- 701411-03 Lane Closure, Multilane, at Entrances or Exit Ramp, for Speeds > 45 MPH
- 702001-04 Traffic Control Devices
- 704001-02 Temporary Concrete Barrier



DISTRICT 2
DIXON, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED 8-11-06
Gregory J. Anderson
DISTRICT ENGINEER

CONTRACT #64606

Summary of Quantities

paycode	description	units	total quantity 100% Urban	SFTY-2A	50% low/50% Illinois Maintenance	50% low/50% Illinois District Budget
50600300	CLEANING AND PAINTING STEEL BRIDGE	L SUM	1			1
50606400	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1			1
59200100	BRIDGE WASHING	EACH	1			1
67100100	MOBILIZATION	L SUM	1			0.5
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	1			0.5
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1			0.2
70100805	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	L SUM	1			1
70400100	TEMPORARY CONCRETE BARRIER	FOOT	750			750
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1300			1300
A Z0030250	IMPACT ATTENUATOR TEMPORARY NON-REDIRECTIVE TEST LEVEL 3	EACH	1			1
A Z0030350	IMPACT ATTENUATOR RELOCATE NON-REDIRECTIVE TEST LEVEL 3	EACH	4			4

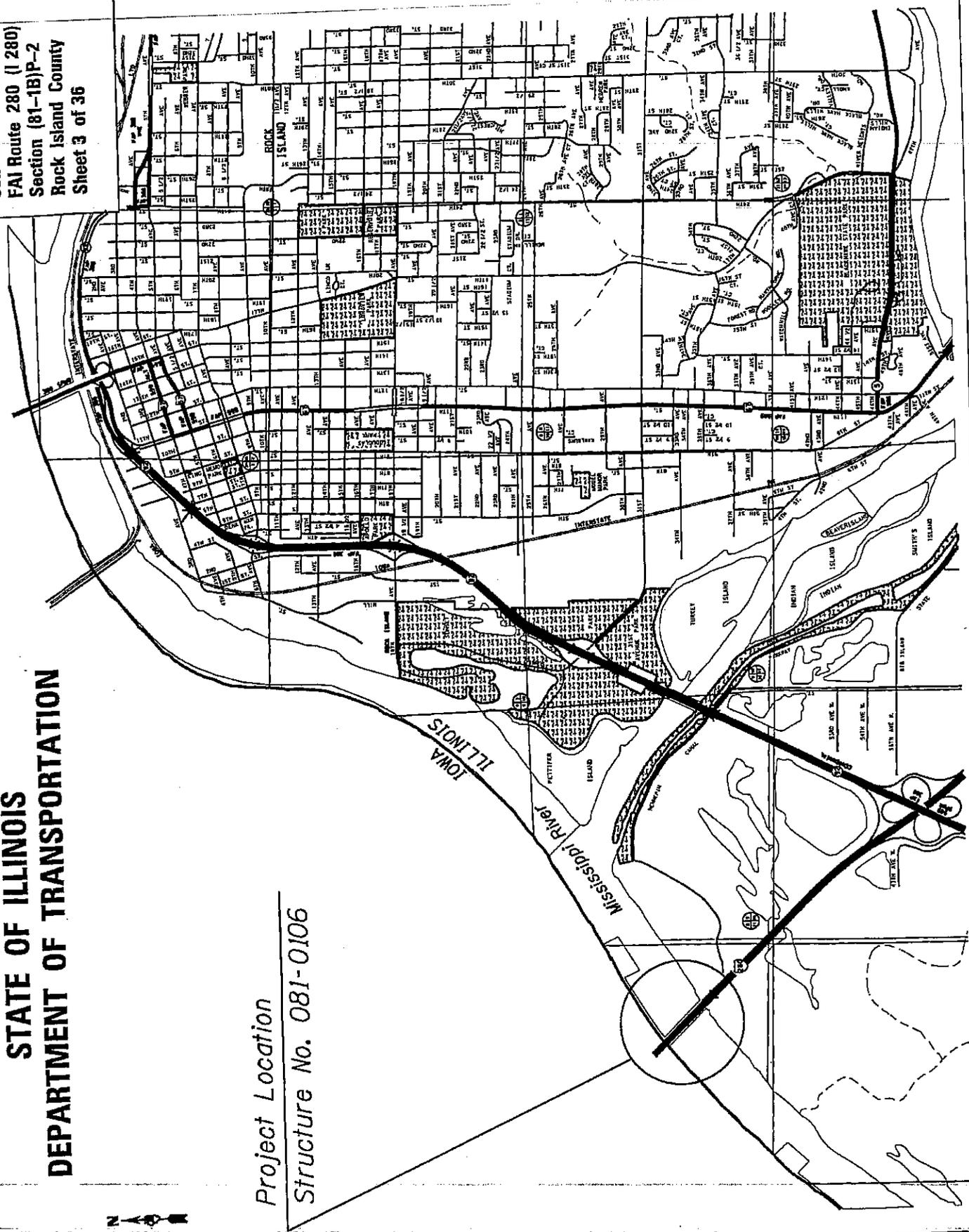
A - SFTY-3N

SSPC QP1 & QP2 PAINTING CONTRACTOR CERTIFICATION WILL BE REQUIRED.

Contract #64606
FAI Route 280 (I 280)
Section (81-1B)P-2
Rock Island County
Sheet 3 of 36

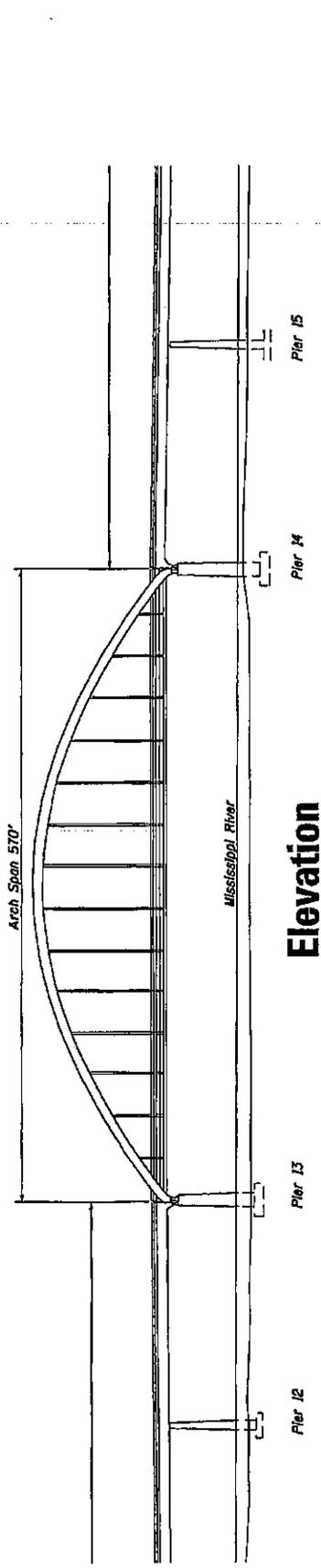
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

*Project Location
Structure No. 081-0106*

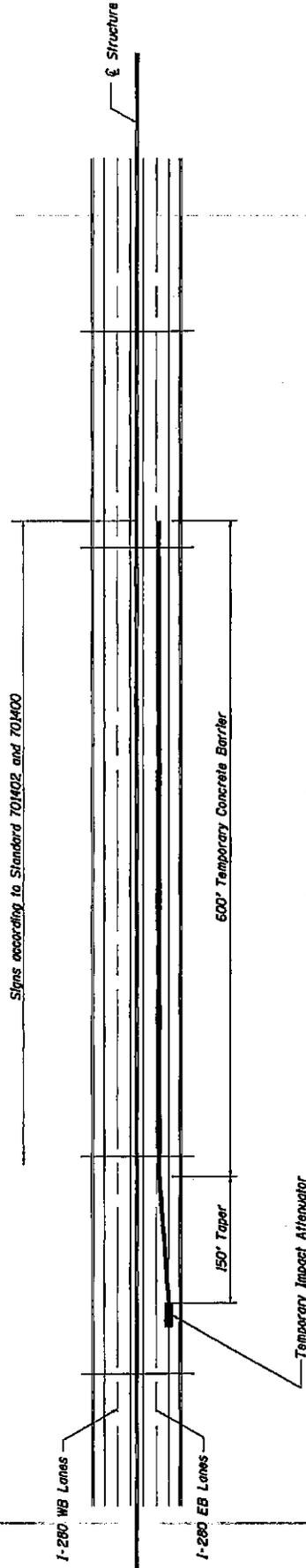


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
Traffic Control Plan
Arch Span

Contract #64606
 FAI Route 280 (I 280)
 Section (81-1B)P-2
 Rock Island County
 Sheet 4 of 36



Elevation



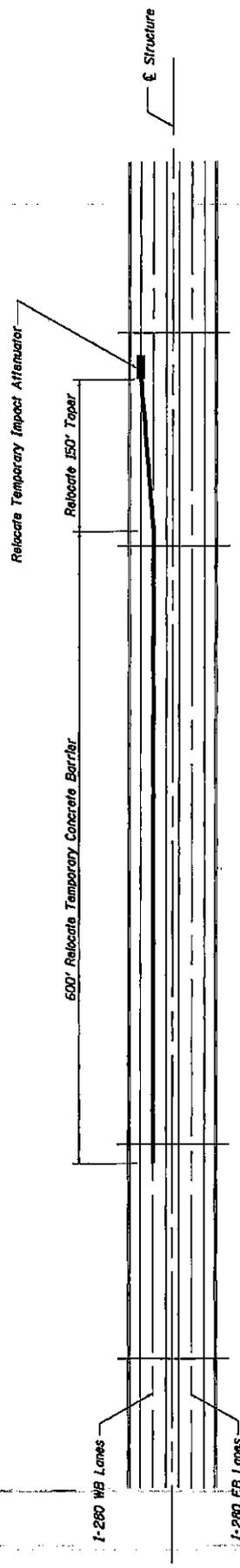
Stage I
Plan View

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION Traffic Control Plan Arch Span

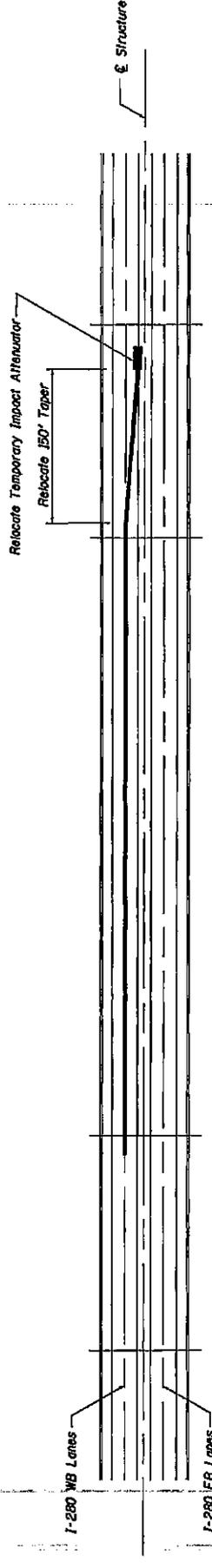
Contract #64606
FAI Route 280 (I 280)
Section (81-1B)P-2
Rock Island County
Sheet 5 of 36



Stage II



Stage III



Stage IV

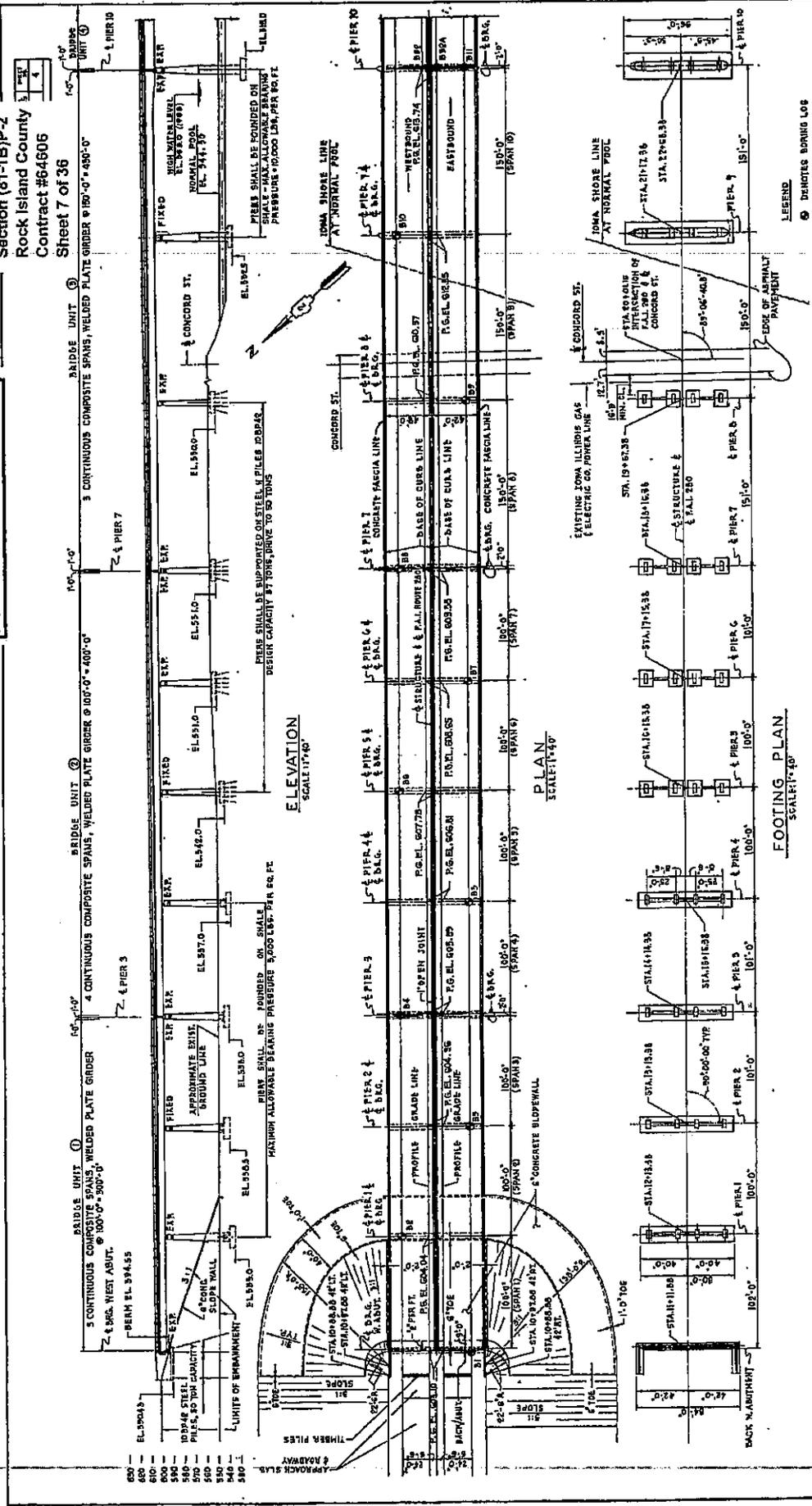
Temporary Concrete Barrier		Relocate Temporary Concrete Barrier	
Stage I	750 Feet	Stage II Taper Only	150 Feet
Total	750 Feet	Stage III Entire Wall	750 Feet
		Stage IV Taper Only	150 Feet
		** Pier 7 Location	250 Feet
		Total	1500 Feet

Impact Attenuator Temporary Non-Reductive Test Level 3		Impact Attenuator Relocate Non-Reductive Test Level 3	
Stage I	1 Each	Stage II	1 Each
Total	1 Each	Stage III	1 Each
		Stage IV	1 Each
		Pier 7	1 Each
		Total	4 Each

** Use 250 Feet of relocated barrier wall to complete the work at Pier 7.

FOR INFORMATION ONLY

FAI Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #64606
 Sheet 7 of 36



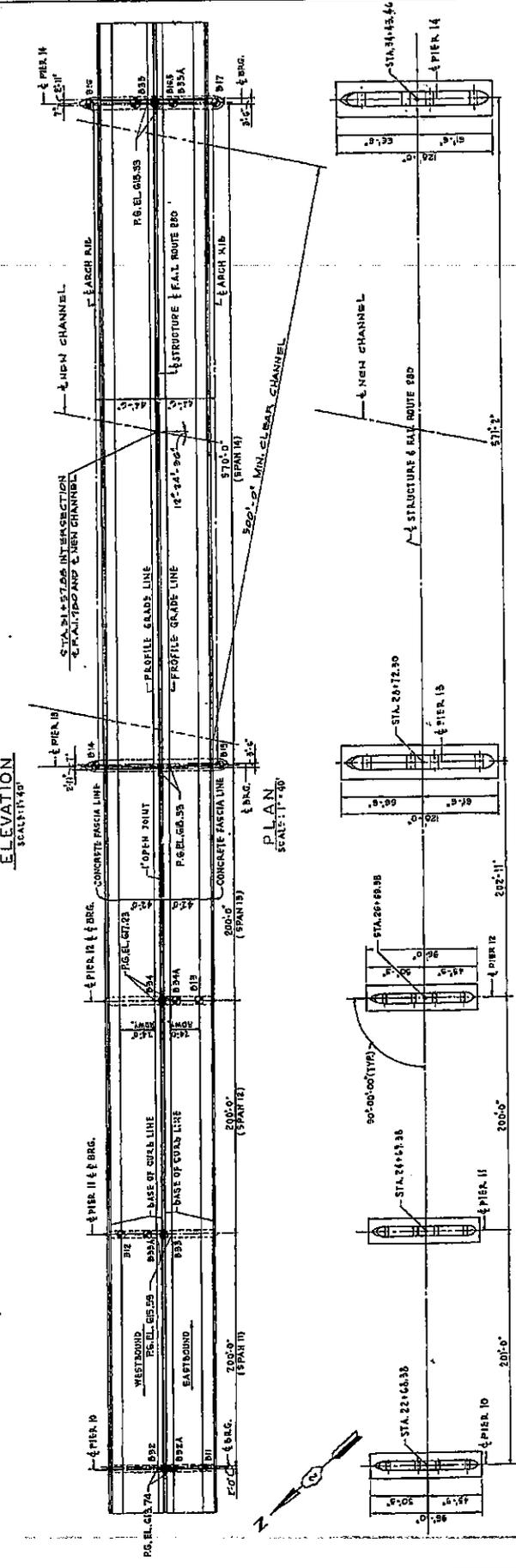
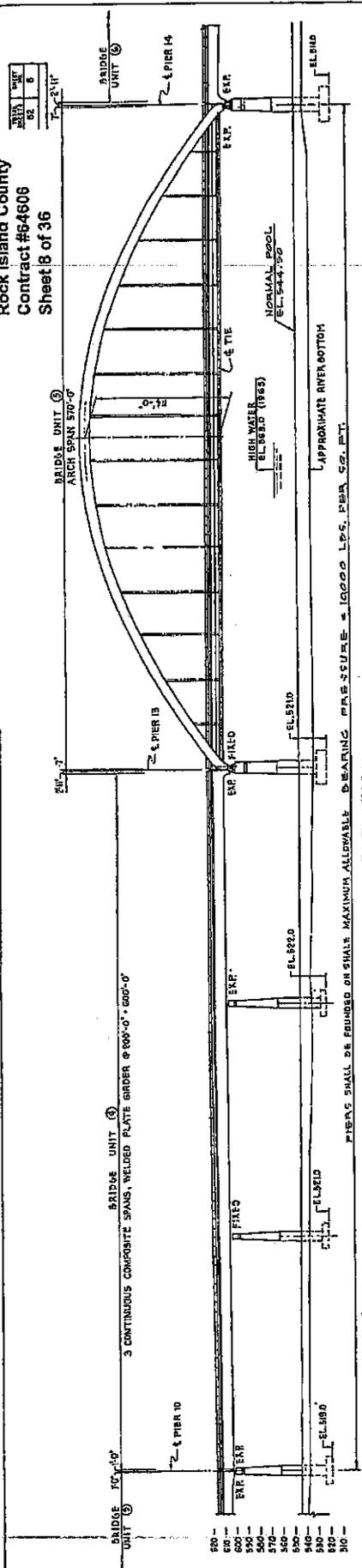
NOTE:
 SEE GENERAL PLAN SHEETS 1, 2 AND 3
 SEE SHEETS NO. 0, 1, 3 AND 10.

GENERAL PLAN, ELEVATION & GROUND PLAN
 BRIDGE UNITS 1, 2 & 3
 FALL NOTE AND SECTION B-B SEE
 1-500 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 11 + 13.38 TO STA. 22 + 88.38
 SHEET 18 NORTH DATE 10/11/78

DESIGNED BY: [Name]
 CHECKED BY: [Name]
 DRAWN BY: [Name]
 IN CHARGE: [Name]
 APPROVED: [Name]

FAI Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #84806
 Sheet 8 of 36

FOR INFORMATION ONLY



GENERAL, PLAN, ELEVATION & GROUND PLAN
 BRIDGE UNITS 4 & 5

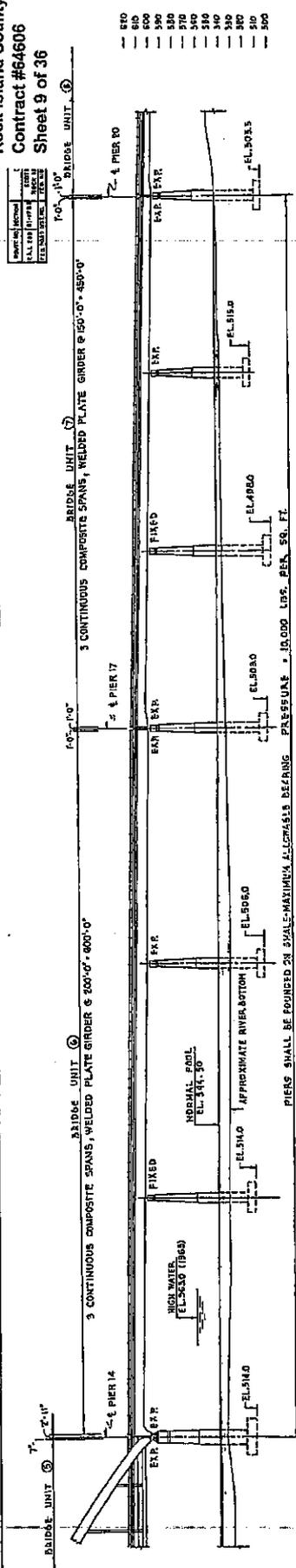
NOTES:
 FOR FRAMING PLAN UNIT 4 SEE SHEET NO. 11.
 FOR ARCH SPAN FRAMING PLAN SEE SHEET NO. 42.

LEGEND:
 ○ DENOTES SPRING LOG

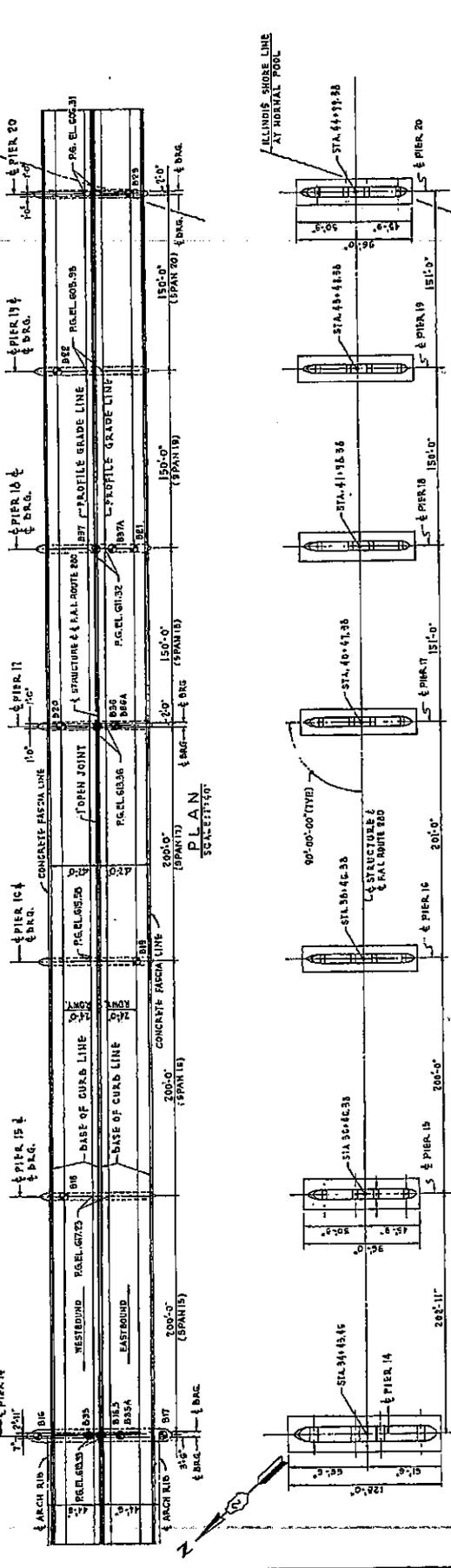
DE LEVA, CATHER & COMPANY ENGINEERS
 DRAWN BY: A. J. MURPHY
 CHECKED BY: W. J. LORTEL
 APPROVED BY: W. B. JORDAN

F.A.I. ROUTE 280 SECTION 81-1B-E
 1-280 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 22+68.30 TO STA. 34+43.46
 SHEET 8 OF 36

FOR INFORMATION ONLY



ELEVATION
 SCALE: 1/4" = 1'-0"



PLAN
 SCALE: 1/4" = 1'-0"

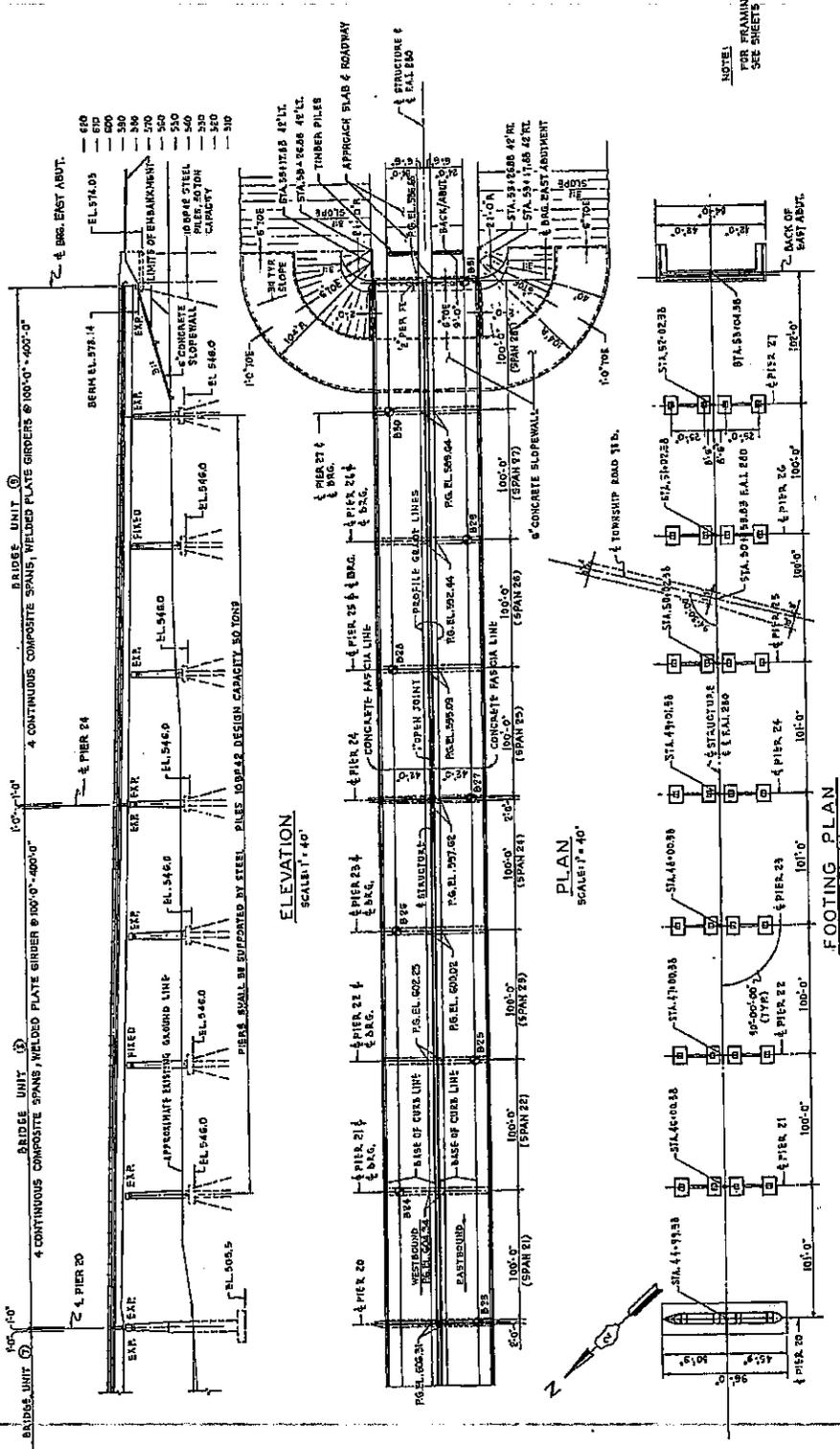
GENERAL PLAN, ELEVATION & GROUND PLAN
 BRIDGE UNITS 6 & 7
 FAI ROUTE 280 SECTION (81-1B)P-2
 1-280 OVER MISSOURI RIVER
 STA. 344+42.46 TO STA. 414+94.38
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 DRAWN BY: J. J. JENSEN
 CHECKED BY: J. J. JENSEN
 APPROVED BY: J. J. JENSEN

NOTE:
 FOR FRAMING PLAN UNITS 6 AND 7
 SEE SHEET NO. 12 AND 13.

LEGEND
 ○ DEROTES BORING LOG

DE LEMO, CATHY & COMPANY ENGINEERS
 DESIGNER BY: M. S. LEMO
 CHECKED BY: M. S. LEMO
 IN CHARGE: M. S. LEMO
 APPROVED: M. S. LEMO

FOR INFORMATION ONLY



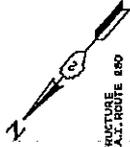
GENERAL PLAN, ELEVATION & GROUND PLAN
 BRIDGE UNITS 6 & 9
 FAI ROUTE 280 SECTION 81-1B-2
 1-280 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 4+19.38 TO STA. 59+02.38
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: 08/19/88

LEGEND
 ○ DENOTES BORING LOG

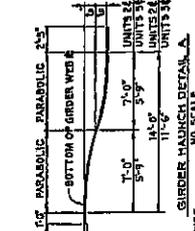
WILLIAM DANFORTH & COMPANY ENGINEERS
 1000 WEST 10TH STREET
 ROCK ISLAND, IOWA 52081
 IN CHARGE: W. DANFORTH
 APPROVED: W. DANFORTH

FOR INFORMATION ONLY

**F&I Route 280
Section (81-1B)P-2
Rock Island County
Contract #64606
Sheet 12 of 36**

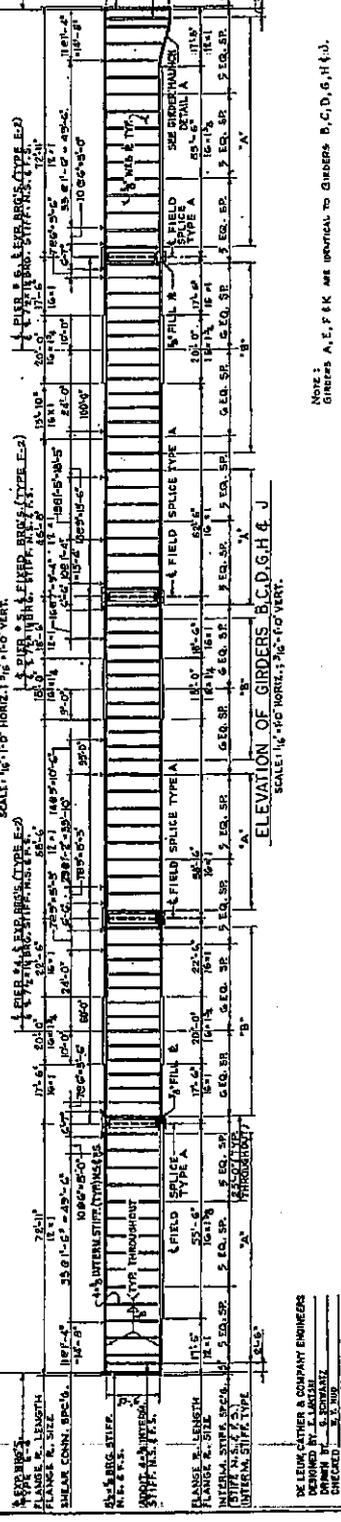
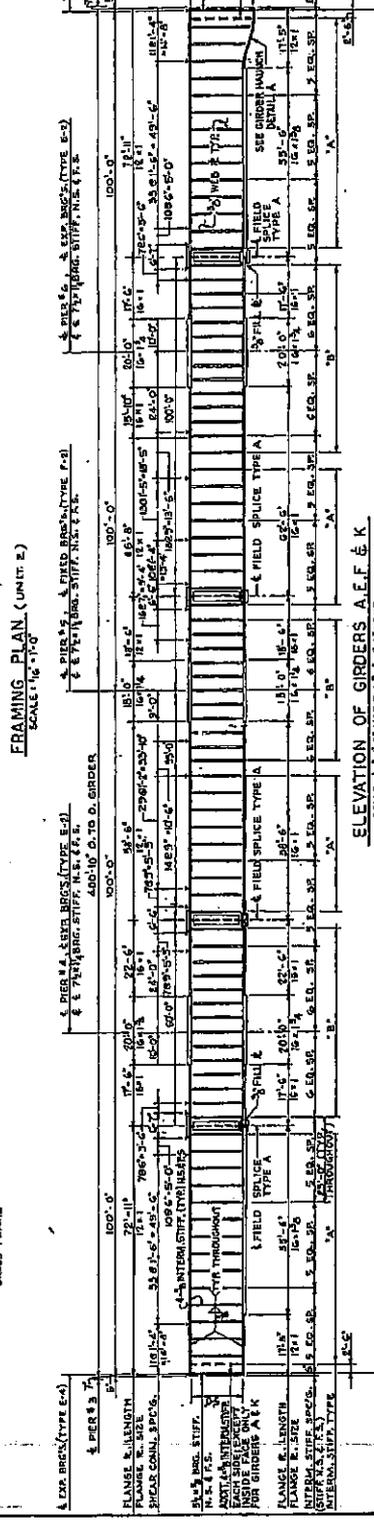
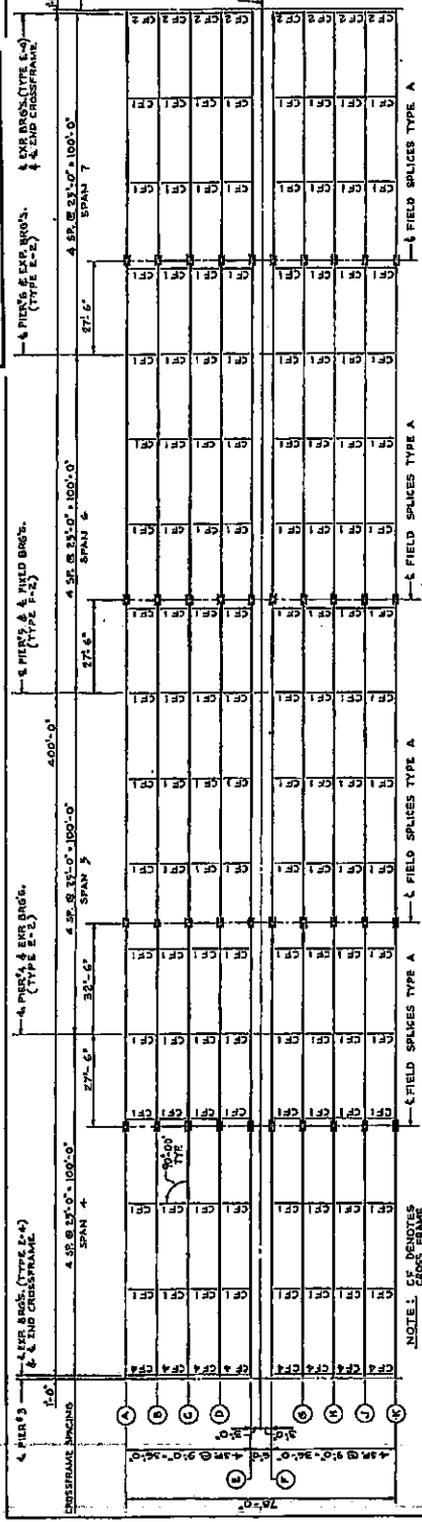


STRUCTURAL STEEL NOTES FOR UNIT 2
ALL STRUCTURAL STEEL SHALL BE ASTM A36.
ALL WELDS SHALL BE E70XX.
FOR DETAILS OF CONNECTIONS SEE SHEETS NO. 29 & 30.
FOR STRUCTURAL STEEL NOTES FOR UNIT 1 THRU
4 AND 6 THRU 9 SEE SH. NO. 8.



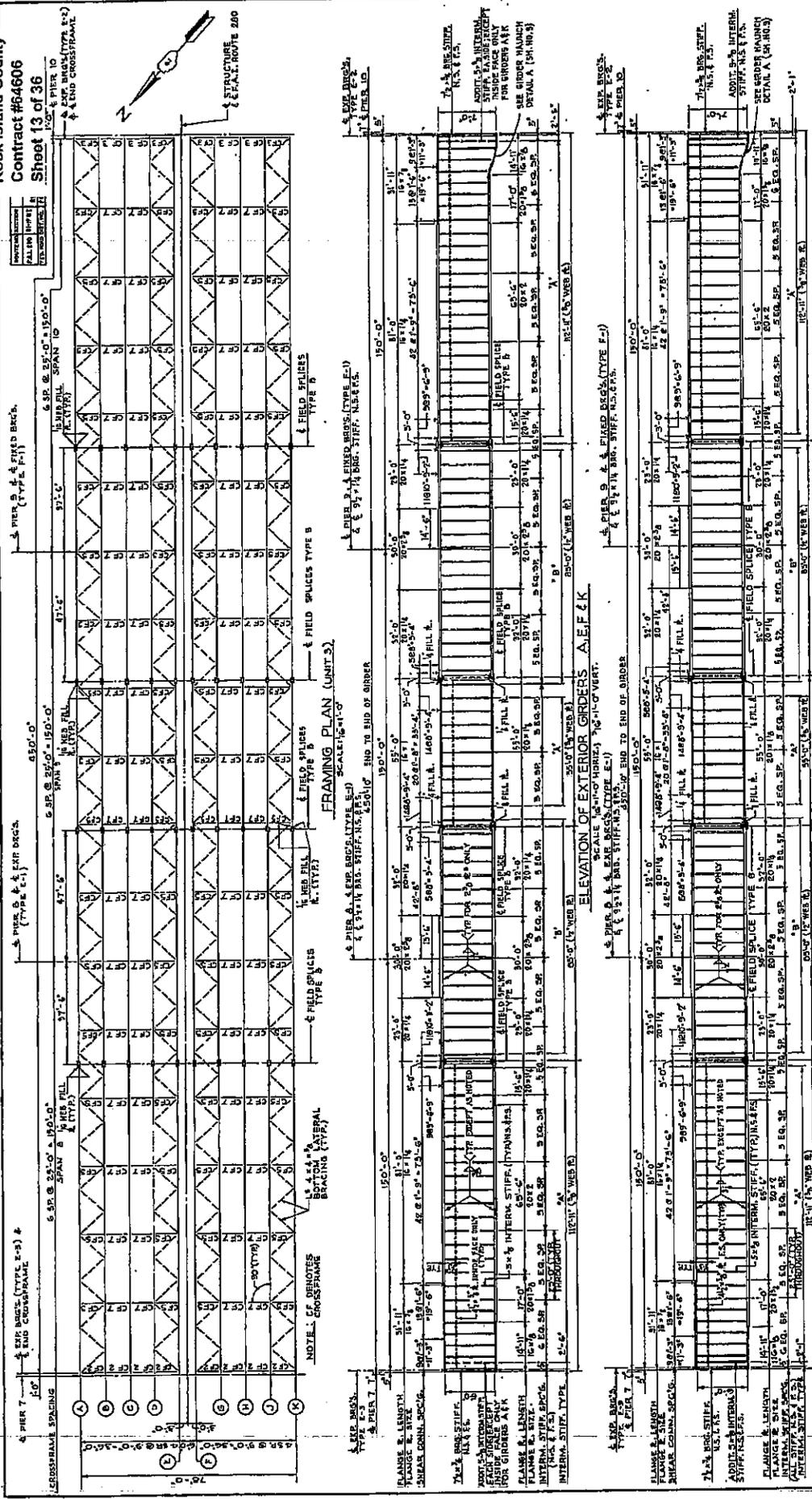
NOTE:
THE STUD SHEAR CONNECTORS ARE NOT PART
OF THIS CONTRACT. THE STUD SHEAR CONNECTORS
ORDER ELEVATIONS FOR INFORMATION ONLY.
THE STUD SHEAR CONNECTORS SHALL BE
ORDERED UNDER THE DECK
CONTRACT (SECTION 81-10).

FRAMING PLAN - UNIT 2
F&I ROUTE 280 SECTION 81-1B P 2
1-80 OVER MISSISSIPPI RIVER
STA. 11+10.38 TO STA. 13+04.39
FIELD AS NOTED
DATE: 05/11/06



DE LEUW CATHY & COMPANY ENGINEERS
DESIGNED BY: J. L. CATHY
CHECKED BY: J. L. CATHY
DATE: 05/11/06
APPROVED: J. L. CATHY

FOR INFORMATION ONLY



FRAMING PLAN - UNIT 3
 FAI ROUTE 280 SECTION 81-1B
 1-280 OVER MISSOURI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 11+10.36 TO STA. 31+04.38
 SCALE: AS SHOWN

NOTE: ALL STRUCTURAL STEEL SHALL BE ASTM - A36.
 FOR ORDER FABRICATION DIAGRAMS SEE SHEET NO. 20.
 FOR DETAIL OF EXPANSION JOINTS AT PIER 17 & 19 SEE SHEET NO. 20.
 FOR DETAIL OF EXPANSION JOINTS AT PIER 17 & 19 SEE SHEET NO. 20.
 FOR BOTTOM BRACING & JOINTS SEE SHEET NO. 20.
 FOR STRUCTURAL STEEL NOTES FOR UNIT 1 THRU 4 AND 6 THRU 9, SEE SHEET NO. 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

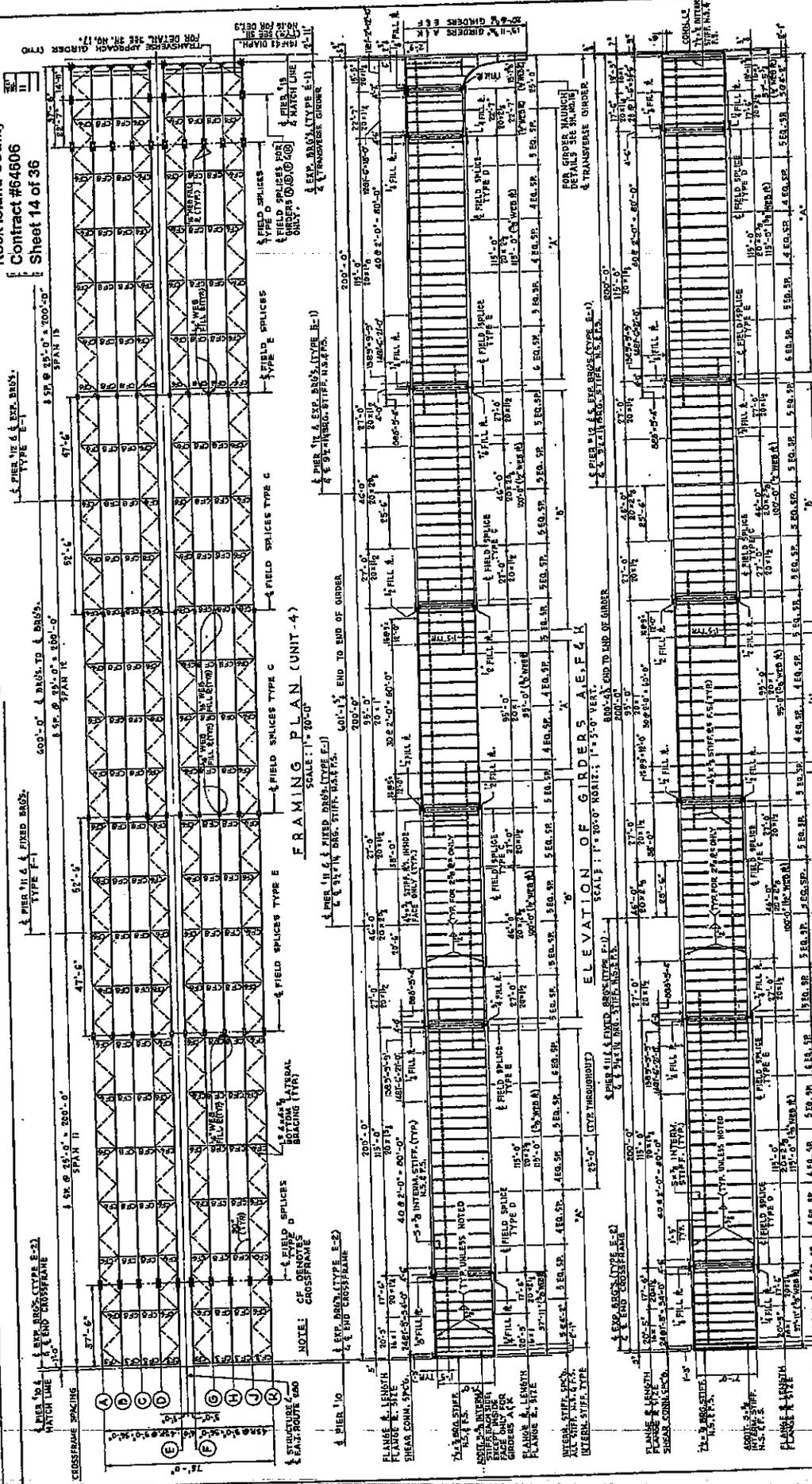
NOTE: THIS STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT AND SHALL BE INSTALLED BY THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-10).

NOTE: THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT AND SHALL BE INSTALLED BY THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED UNDER THE DECK CONTRACT (SECTION 81-10).

DESIGNED BY: E. LAUREN
 DRAWN BY: S. JENSEN
 CHECKED BY: M. JAMES
 APPROVED: K. ROBE

FAI Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #64906
 Sheet 14 of 36

FOR INFORMATION ONLY

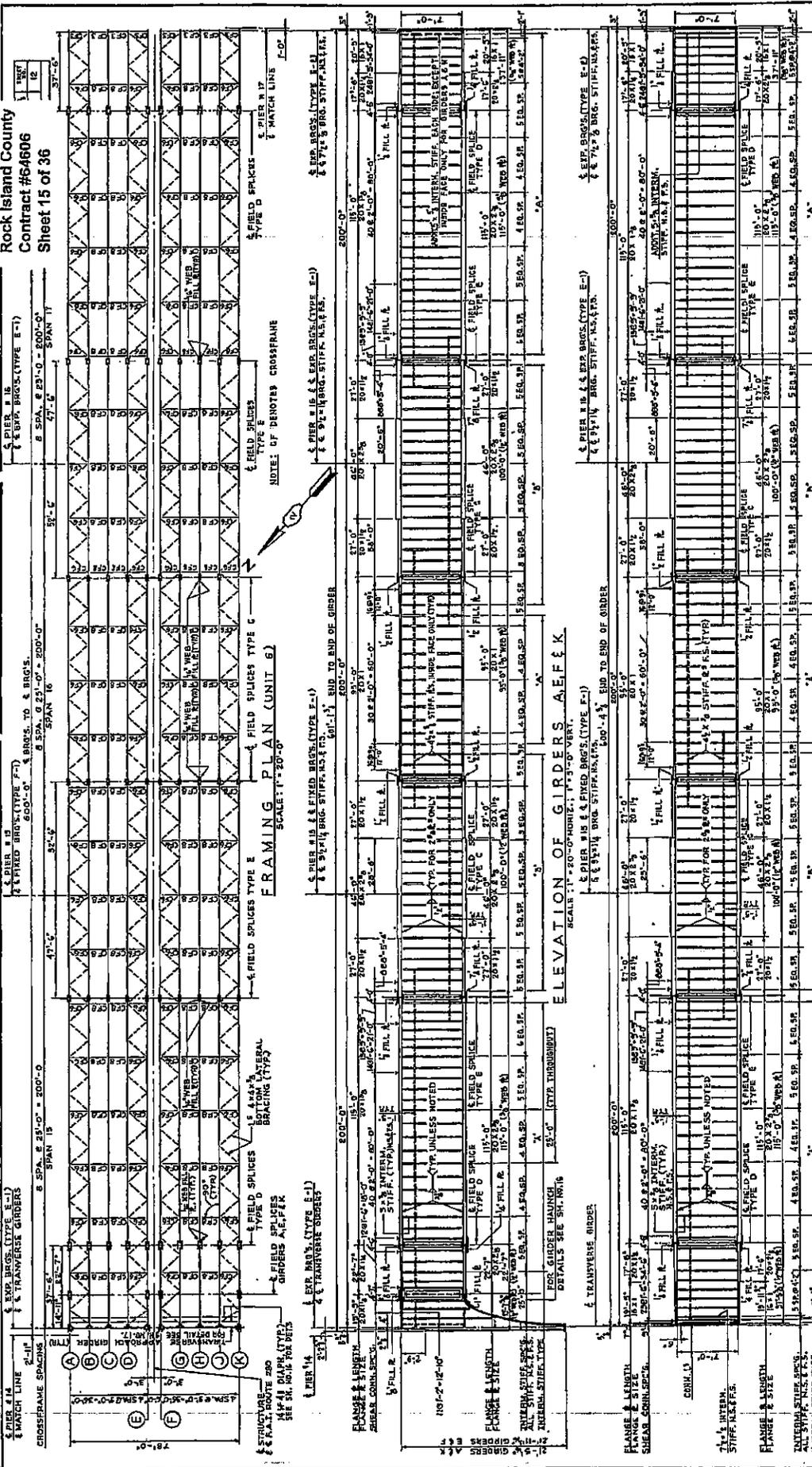


FRAMING PLAN - UNIT 4
 P.A.L. ROUTE 280 SECTION SHEET 14
 I-280 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 SCALE: 1" = 10'-0" HORIZ.; 1" = 5'-0" VERT.
 STRUCTURAL STEEL NOTES FOR UNIT 4
 ALL STEEL MEMBERS SHALL BE ASTM-A36 EXCEPT FOR
 ALL TRANSVERSE STIFFENERS, LONGITUDINAL STIFFENERS & END DIAPHRAGMS STRUCTURAL
 STEEL ASTM-A572 SHALL BE USED. SEE BR. NO. 21.
 FOR GABLE FABRICATION DETAILS AT PLENS NO. 10 & NO. 15 SEE SHEET 13 & 14
 FOR GABLE FABRICATION DETAILS AT PLENS NO. 10 & NO. 15 SEE SHEET 13 & 14
 FOR BOTTOM BRACING & LONGITUDINAL STIFFENER DETAILS SEE SHEET 13 & 14
 FOR BOTTOM BRACING & LONGITUDINAL STIFFENER DETAILS SEE SHEET 13 & 14
 FOR STRUCTURAL STEEL NOTES FOR UNITS 1 THRU 4 AND 6 THRU 9 SEE SHEET 13

ELEVATION OF GIRDERS B, C, D, G, H & J
 SCALE: 1" = 10'-0" HORIZ.; 1" = 5'-0" VERT.
 NOTE: THE STUD SHELS CONNECTIONS ARE NOT PART OF THIS
 CONTRACT. THE STUD SHELS SHALL BE SUPPLIED BY THE
 CONTRACTOR. THE STUD SHELS SHALL BE INSTALLED UNDER THE DECK
 CONTRACT (SECTION 81-10).
 DE LOWE, CARRIER & COMPANY ENGINEERS
 1000 W. 10TH ST. SUITE 100
 ROCK ISLAND, ILL. 61201
 CHECKED BY: J. W. BROWN
 DRAWN BY: J. W. BROWN

FAI Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #64606
 Sheet 15 of 36

FOR INFORMATION ONLY



FRAMING PLAN - UNIT 6
 ALL BRIDGE DECK SECTION SHAPES
 TO BE AS SHOWN UNLESS NOTED OTHERWISE

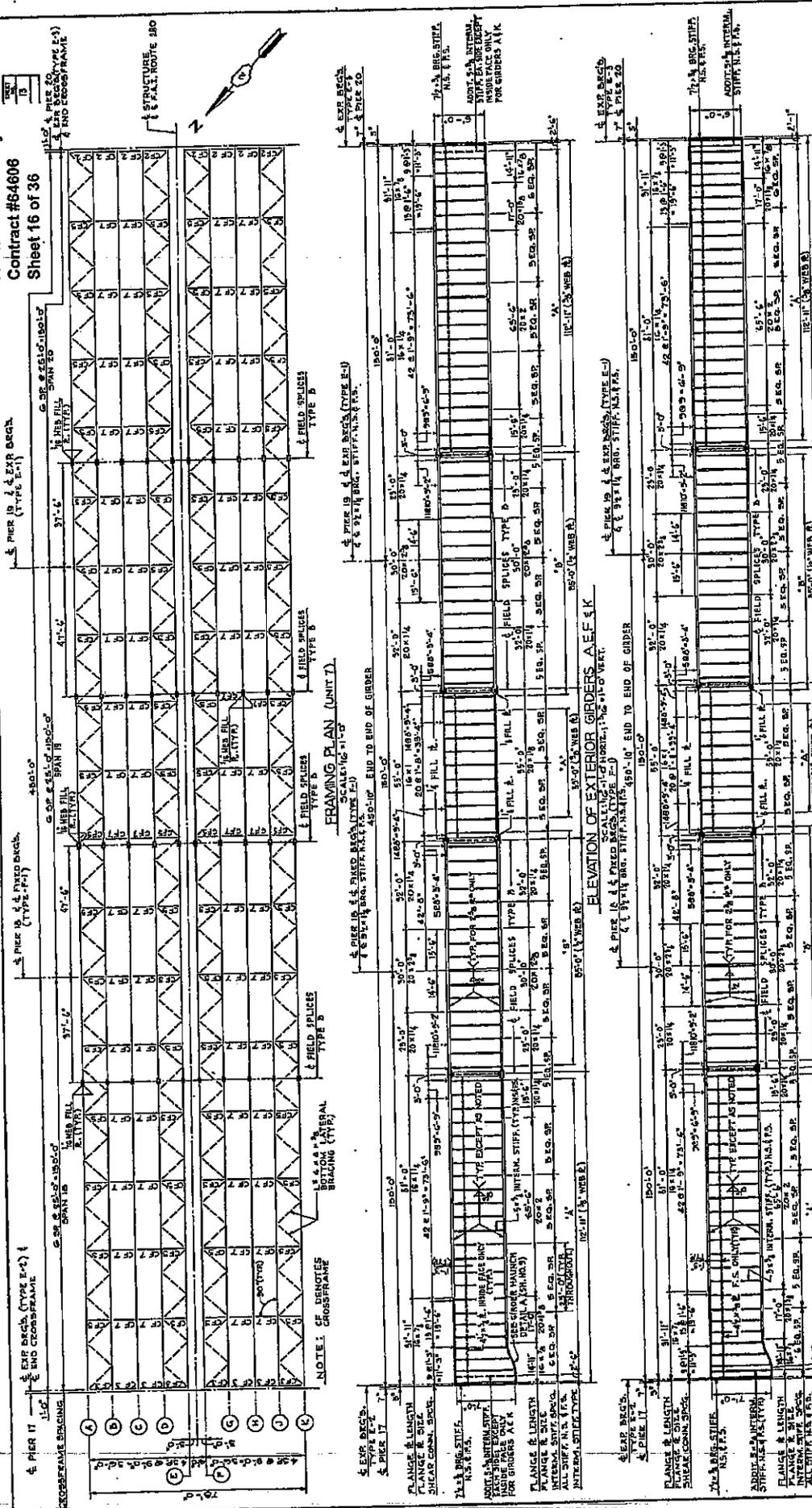
ELEVATION OF GIRDERS A, E, F, & K
 ALL STRUCTURAL STEEL NOTES FOR UNIT 6
 ALL STRUCTURAL STEEL IN THIS UNIT SHALL BE ASTM-A572-50 EXCEPT FOR
 CROSSFRAMES, INTERMEDIATE STIFFENERS, LONGITUDINAL STIFFENERS & END DIAPHRAGMS
 WHICH SHALL BE ASTM-A36 UNLESS NOTED OTHERWISE
 FOR GIRDER FABRICATION DIMENSIONS SEE SH. NO. 12
 FOR DETAIL OF EXPANSION JOINTS AT PIER NO. 14 & NO. 17 SEE SH. NO. 27 & 28 RESPECTIVELY
 FOR BOTTOM BRACING & LONGITUDINAL STIFFENERS DETAILS SEE SH. NO. 29 & 30 RESPECTIVELY
 FOR STRUCTURAL STEEL NOTES FOR UNITS 1 THRU 4 AND 6 THRU 9, SEE SH. NO. 6.

ELEVATION OF GIRDERS B, C, D, G, H, & J
 SCALE: 1" = 20'-0" HORIZ.; 1" = 5'-0" VERT.
 NOTE: THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT
 BUT ARE SHOWN FOR INFORMATION. THE STUD SHEAR CONNECTORS SHALL BE FURNISHED AND INSTALLED
 UNDER THE DECK CONTRACT (SECTION 81-1D).

DEFLEK-CANTER & COMPANY ENGINEERS
 2014 1/2 S. MAIN ST. ROCK ISLAND, ILL. 61201
 CHECKED BY: W.J. BERRY
 IN CHARGE: W.J. BERRY
 APPROVED: W.J. BERRY

FAI Route 280
 Section (S1-B)P-2
 Rock Island County
 Contract #64606
 Sheet 16 of 36

FOR INFORMATION ONLY



FRAMING PLAN - UNIT 7
 F.A.I. ROUTE 280 SECTION SHIFTS
 I-280 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 11+11.38 TO STA. 35+04.38
 FIELD 28 NOTED
 DATE 12/1/1978

STRUCTURAL STEEL NOTES FOR UNIT 7
 ALL STRUCTURAL STEEL SHALL BE ASTM - A36
 FOR ORDER FABRICATION DIAGRAMS SEE SHEET NO. 20
 FOR DETAIL OF EXPANSION JOINTS AT PIERS 17 & 20 SEE SH. NO. 20.
 FOR BOTTOM BRACING AND LONGITUDINAL STIFFENER DETAILS SEE SHEETS
 NO. 22 AND NO. 23.
 ALL STEEL NOTES FOR UNITS 1 THRU 4 AND 6 THRU 9
 SEE SHEET NO. 1.
 ORDERS A, E, F & K ARE IDENTICAL TO ORDERS B, C, D, G, H & J.

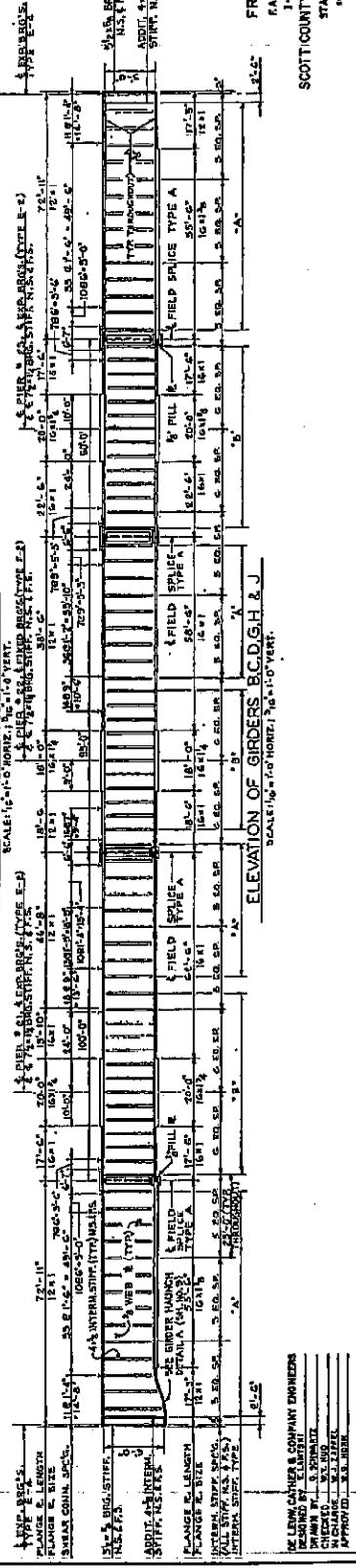
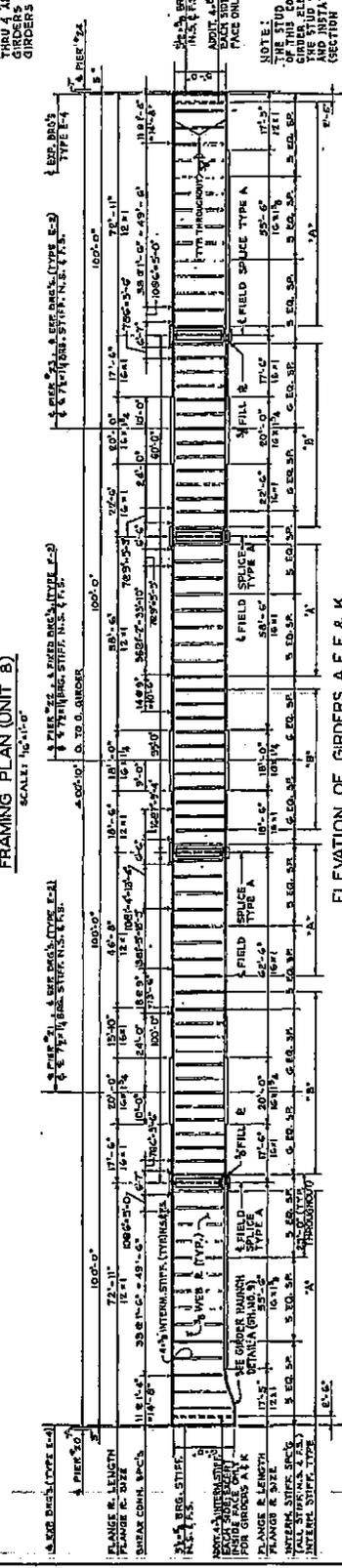
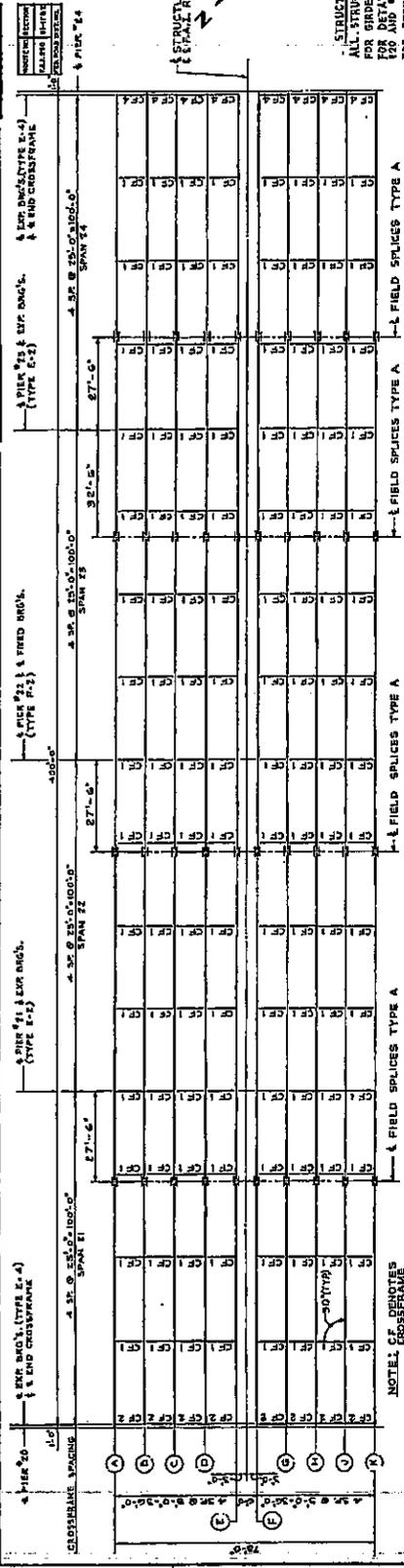
ELEVATION OF GIRDERS B, C, D, G, H, J
 SCALE: 1/2" = 1'-0" HORIZ., 1/8" = 1'-0" VERT.

NOTE: THE STUD SHEAR CONNECTORS ARE NOT PART OF THIS CONTRACT
 BUT ARE SHOWN ON THE ORDER ELEVATIONS FOR INFORMATION ONLY.
 THE STUD SHEAR CONNECTORS SHALL BE SUPPLIED AND INSTALLED
 UNDER THE DECK CONTRACT (SECTION 01-10).

DE LUCA, CARTER & COMPANY ENGINEERS
 DESIGNED BY: L. L. LAMBERT
 CHECKED BY: W. R. BROWN
 IN CHARGE: W. R. BROWN
 APPROVED: W. R. BROWN

FBI Route 280
 Section (81-B)P-2
 Rock Island County
 Contract #84606
 Sheet 17 of 36

FOR INFORMATION ONLY



STRUCTURAL STEEL NOTES FOR UNIT 8
 ALL STRUCTURAL STEEL SHALL BE A36
 FOR SHEAR FABRICATION PLANS AND A572 GR 50
 FOR DETAIL OF EXPANSION JOISTS AT PIERS
 170 AND 174 SEE SHEETS NO. 83 & 84
 FOR STRUCTURAL STEEL NOTES FOR UNITS 1
 THROUGH 7 SEE SHEET NO. 1
 GIRDERS A, E, F, K ARE IDENTICAL TO
 GIRDERS B, C, D, G, H, J.

NOTE:
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 DRAWINGS FOR INFORMATION ONLY. THE STUD SHEAR
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 AND INSTALLED UNDER THE DECK CONTRACT
 (SECTION 8-10).

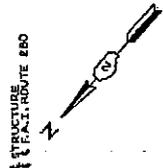
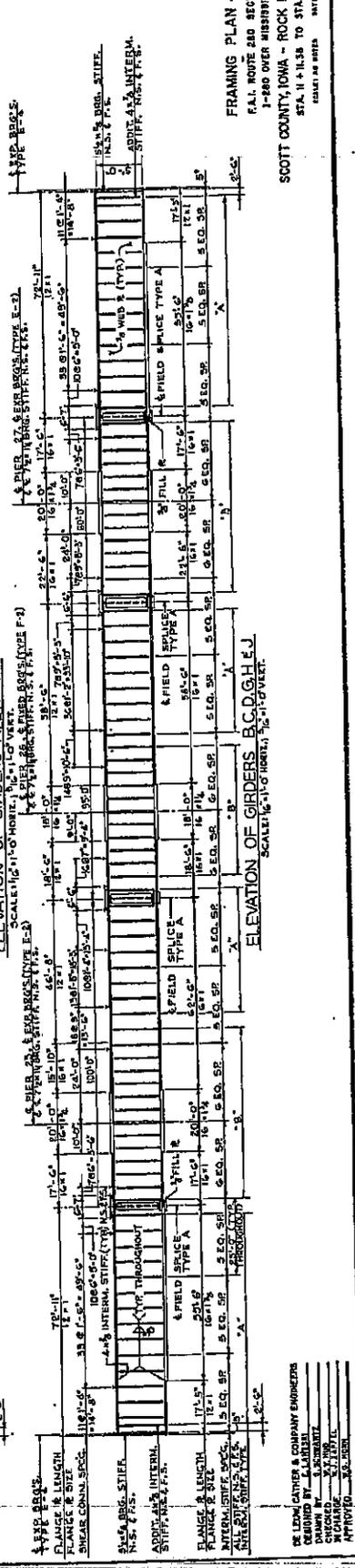
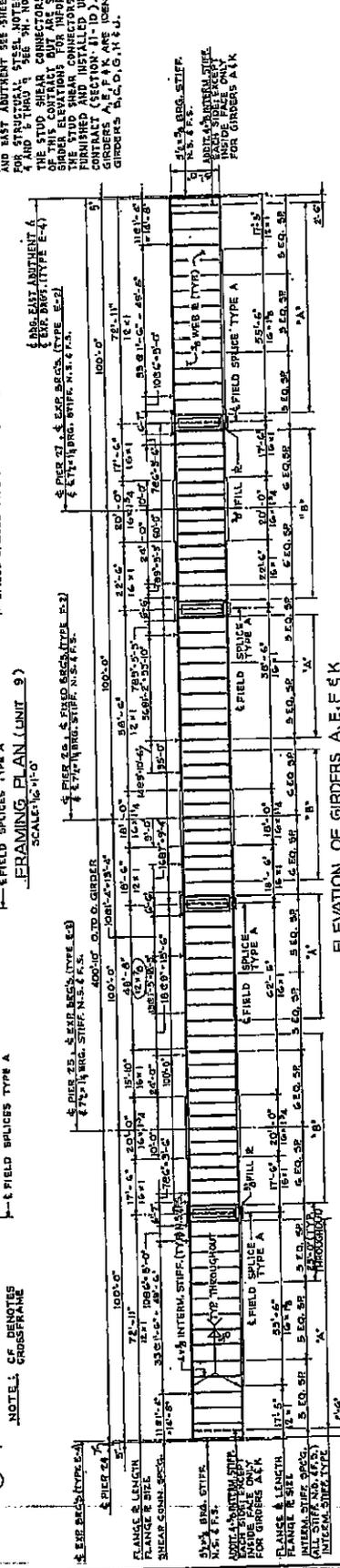
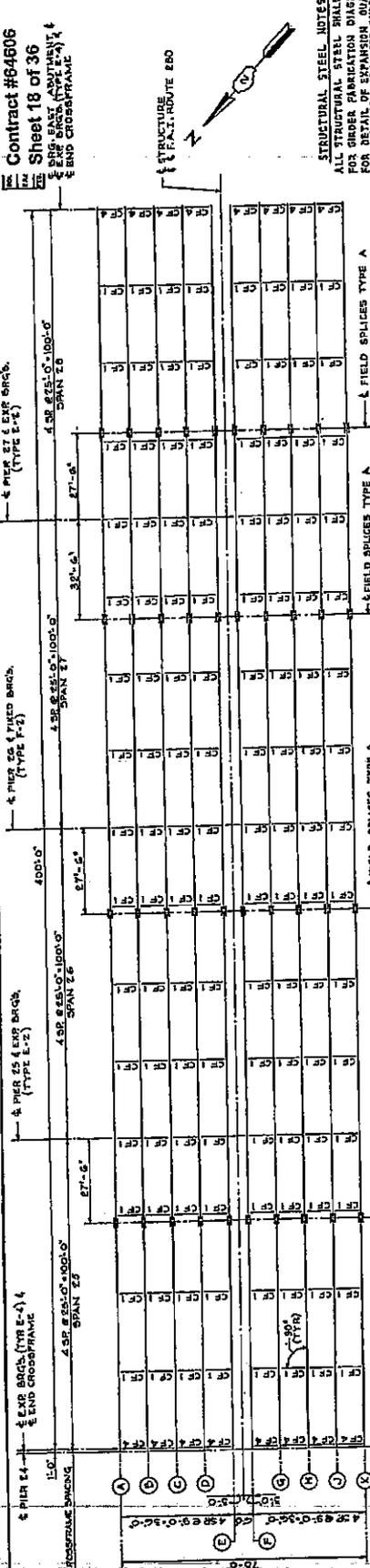
NOTE:
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 DRAWINGS FOR INFORMATION ONLY. THE STUD SHEAR
 CONNECTORS SHALL BE FURNISHED
 AND INSTALLED UNDER THE DECK CONTRACT
 (SECTION 8-10).

FRAMING PLAN - UNIT 8
 FBI ROUTE 280 SECTION 810706
 1-280 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 11+13.36 TO STA. 83+04.36
 SCALE: 1/8" = 1'-0" HORIZ. 1/8" = 1'-0" VERT.

FOR LEWIS GUNTER & COMPANY ENGINEERS
 DESIGNED BY: E. L. HARTSHORN
 DRAWN BY: S. SCHWARTZ
 CHECKED BY: W. J. LITZEL
 IN CHARGE: W. J. LITZEL
 APPROVED: W. B. BRUB

FBI Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #84806
 Sheet 18 of 36
 DRG. EAST ADJUTMENT 4
 END CROSSFRAME

FOR INFORMATION ONLY



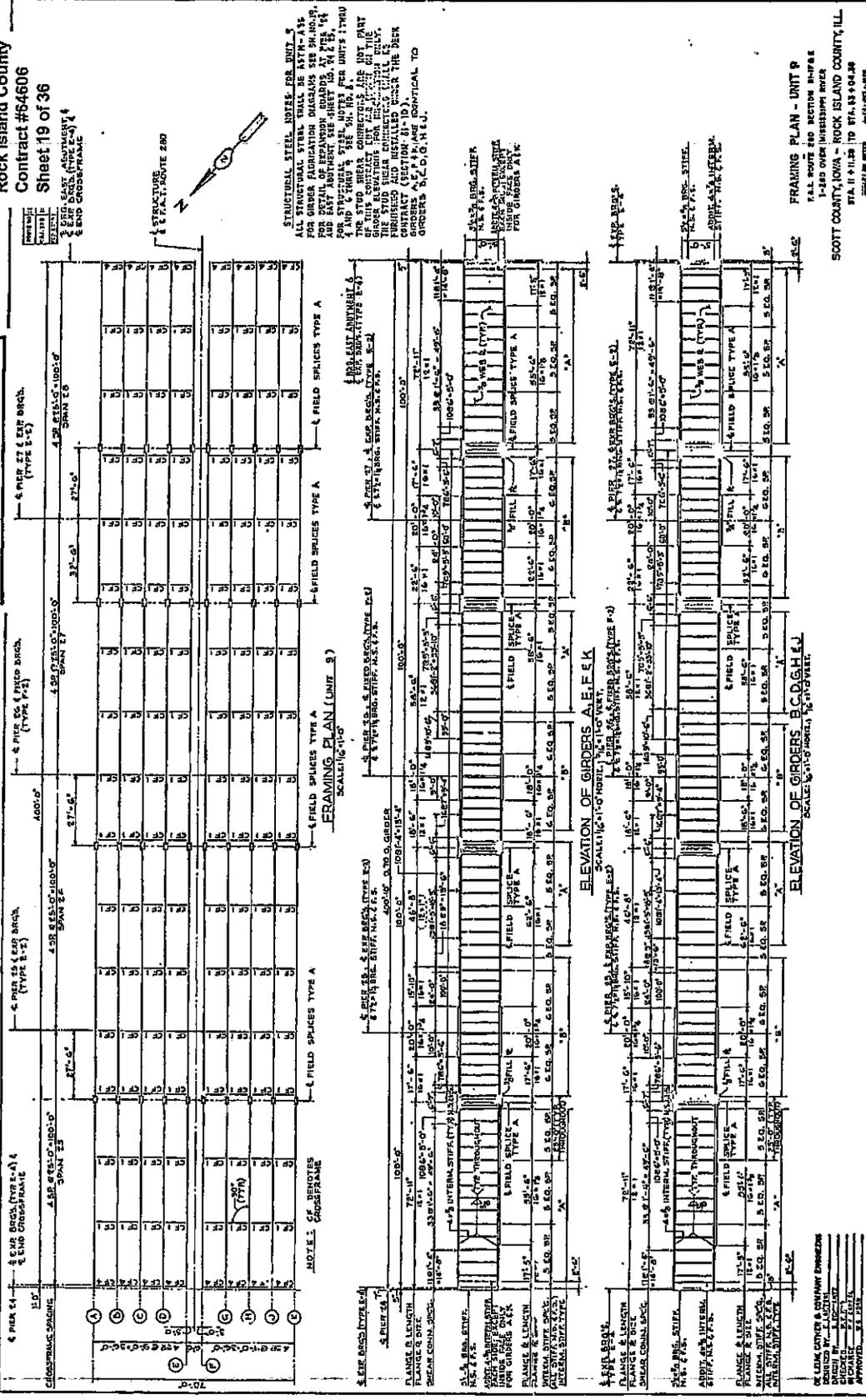
STRUCTURAL STEEL NOTES FOR UNIT 9
 ALL STRUCTURAL STEEL SHALL BE ASTM-A36
 FOR GIRDER FABRICATION DIAGRAMS SEE SH. 10, 11,
 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23,
 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34,
 35, 36, 37, 38, 39, 40, 41, 42, 43, 44,
 45, 46, 47, 48, 49, 50, 51, 52, 53, 54,
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 999, 1000

FRAMING PLAN - UNIT 9
 F.A.I. ROUTE 280 SECTION 81-1B
 1-280 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 11+11.58 TO STA. 13+04.38
 DRAWN BY: [Name] DATE: [Date]

DE: LEWIS CATHER & COMPANY ENGINEERS
 DESIGNED BY: J. GIBBETZ
 CHECKED BY: J. GIBBETZ
 IN CHARGE: J. GIBBETZ
 APPROVED: [Signature]

FAI Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #84606
 Sheet 19 of 36

FOR INFORMATION ONLY

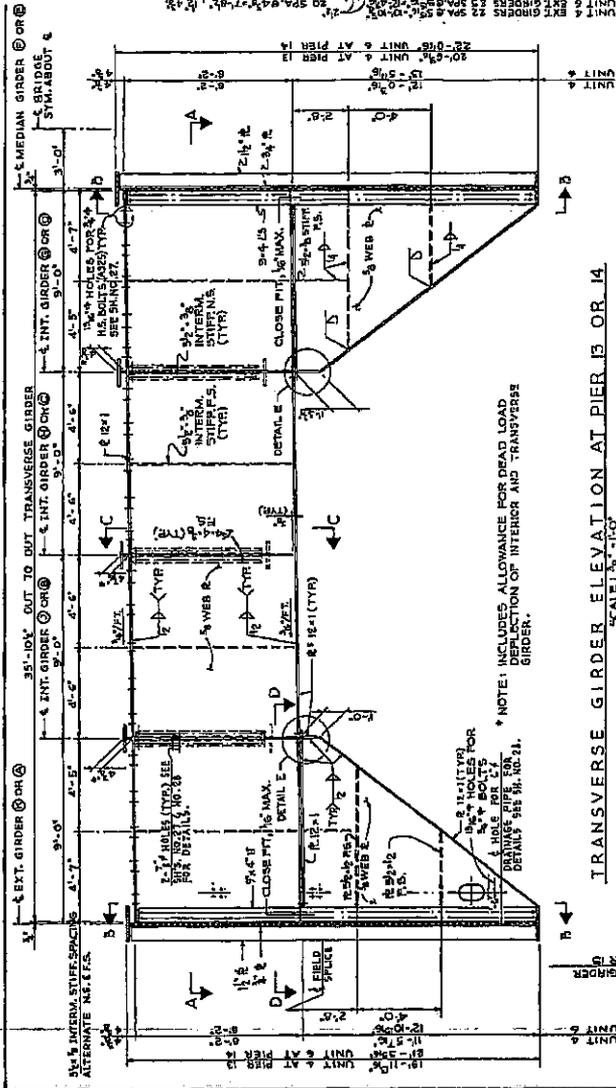


FRAMING PLAN - UNIT 8
 ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED
 1-20 OVER INTERSECTION UNLESS OTHERWISE NOTED
 S.C.T. 11-11-88 TO S.P. 83-9-88
 S.C.T. 11-11-88 TO S.P. 83-9-88

OK LUMK CONSTRUCTION COMPANY ENGINEERING
 DRAWN BY: J. LUMK
 CHECKED BY: J. LUMK
 IN CHARGE: J. LUMK
 DATE: 11-11-88

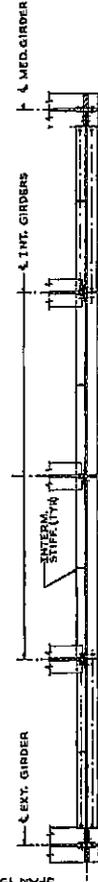
FAI/Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #64606
 Sheet 21 of 36

FOR INFORMATION ONLY

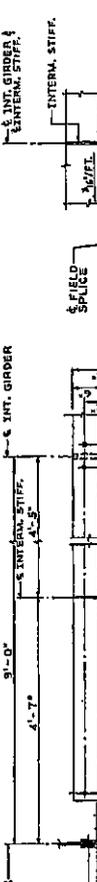


TRANSVERSE GIRDER ELEVATION AT PIER 13 OR 14
 SCALE: 1/8" = 1'-0"

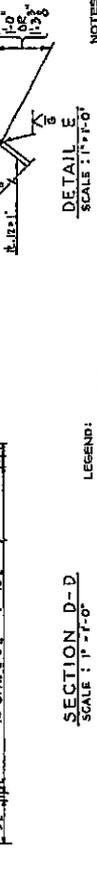
* NOTE: INCLUDES ALLOWANCE FOR DEAD LOAD
 DIMENSION OF INTERIOR AND TRANSVERSE
 GIRDER.



SECTION A-A
 SCALE: 1/8" = 1'-0"



SECTION B-B
 SCALE: 1/8" = 1'-0"



SECTION C-C
 SCALE: 1/8" = 1'-0"



SECTION D-D
 SCALE: 1/8" = 1'-0"



DETAIL E
 SCALE: 1/8" = 1'-0"



SECTION F-F
 SCALE: 1/8" = 1'-0"

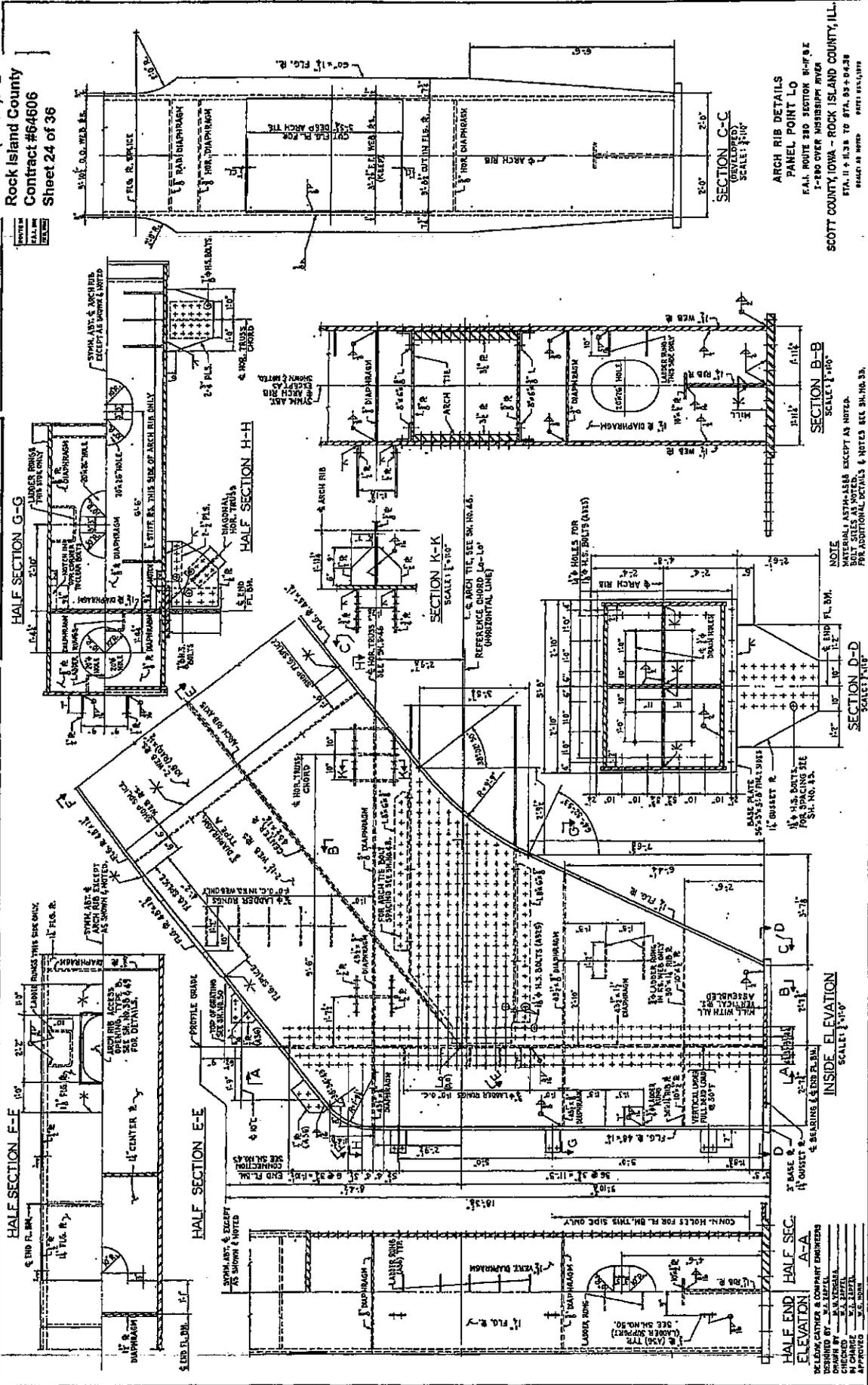
LEGEND:
 P.S. - PAIN SIDE
 S.S. - STREET SIDE
 B.S. - BACK SIDE

NOTES:
 FOR FRAMING PLAN UNITS, SEE SHEETS NO. 11 & 12.
 FOR STRUCTURAL STEEL NOTES, SEE SHEET NO. 3.
 ALL FASTENERS FOR CONNECTIONS SHALL BE HIGH
 STRENGTH BOLTS A.S.T.M. A325; BOLTS 5/8" & 7/8"
 HOLES 1/8" & 1/4" OVER.
 WORK THIS SHEET WITH SHEETS NO. 11, 12, 15, 27 & 28.

DE LEW, LATHER & COMPANY ENGINEERS
 DESIGNED BY: M. J. BARR
 DRAWN BY: S. J. BARR
 IN CHARGE: W. J. BARR
 APPROVED: W. J. BARR

TRANSVERSE APPROACH GIRDERS AT
 PIERS 13 AND 14
 F.A.I. ROUTE 280 SECTION BUI-FAE
 I-280 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 11+03.3 TO STA. 83+04.38
 SHEET NO. 21 OF 36

FOR INFORMATION ONLY



DESIGNED BY: W. J. ZETTEL
 CHECKED BY: W. J. ZETTEL
 IN CHARGE: W. J. ZETTEL
 APPROVED: W. J. ZETTEL

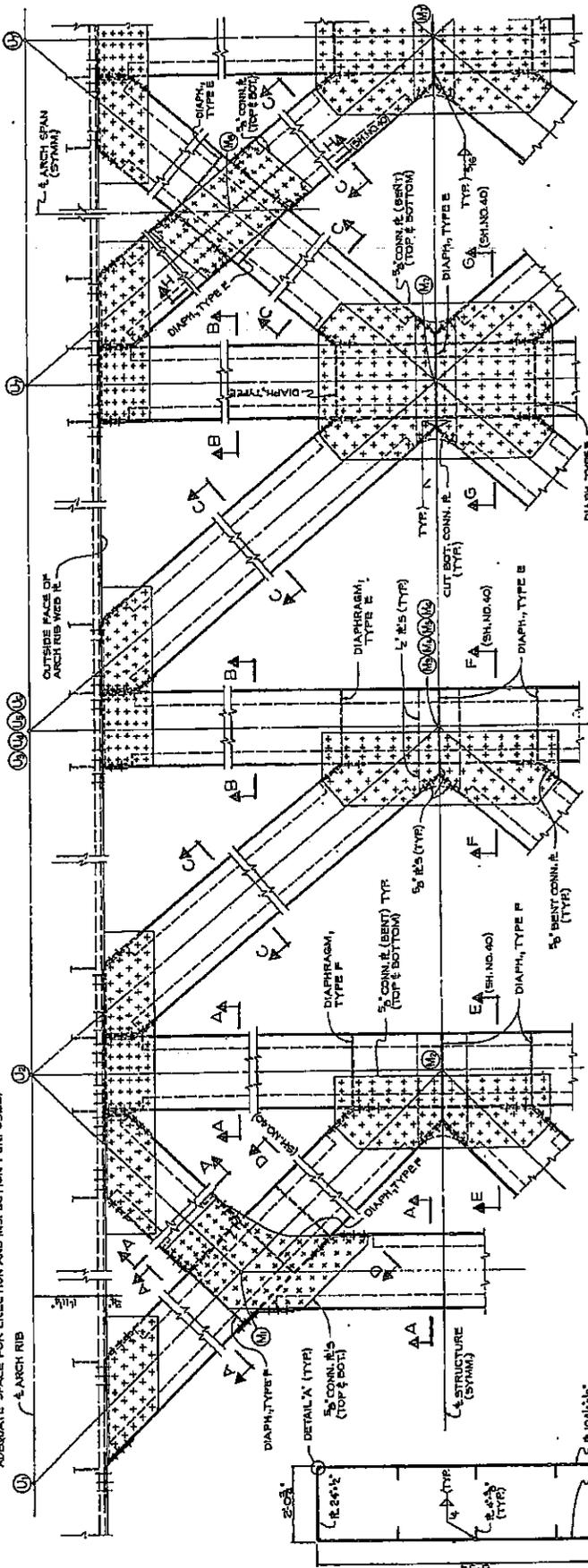
ARCH RIB DETAILS
 PANEL POINT LO
 F.A.I. ROUTE 280 SECTION B-B-P-2
 I-180 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 11+5.38 TO STA. 95+04.38
 SHEET 24 OF 36

FAI Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #64606
 Sheet 25 of 36

FOR INFORMATION ONLY

NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NUMBER OF EQUAL DIAPHRAGM SPACES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

DIAPHRAGM NOTE 1:
 DIAPHRAGMS SHALL BE PLACED AT THE LATERAL INTERSECTIONS AS SHOWN, THE NUMBER OF EQUAL DIAPHRAGM SPACES REQUIRED FOR EACH MEMBER DIAPHRAGM BE ADJACENT TO THE END CONNECTION SHALL BE PLACED AS NEAR TO THE END AS PRACTICAL, ALLOWING APPROPRIATE SPACE FOR ERECTION AND INSPECTION PURPOSES.

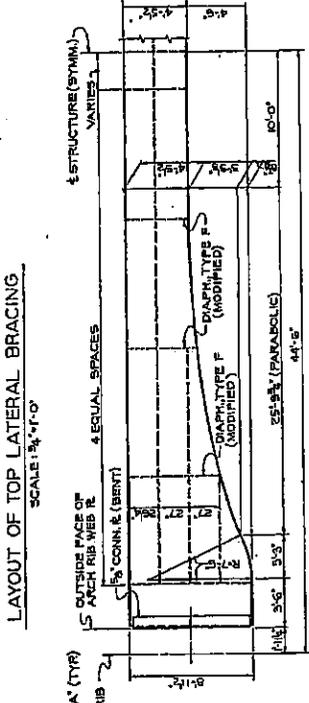


NOTES:

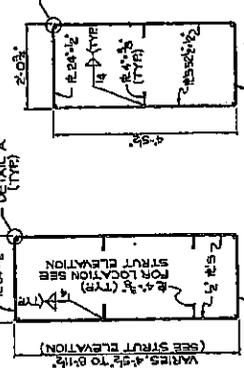
ALL STRUCTURAL STEEL FOR THE TOP LATERAL BRACING MEMBERS AND BOLTED CONNECTION PLATES SHALL BE A.S.T.M. - A50. ALL FASTENERS SHALL BE 3/4" HIGH STRENGTH ALL TOP LATERAL BRACING MEMBERS SHALL BE FABRICATED TO FIT THE FINAL GEOMETRIC PANEL LENGTHS OF THE ARCH RIB UNDER FULL DEAD LOAD FOR DETAILS AND LOCATIONS OF ACCESS COVERS SEE SHEET NO. 40. FOR ADDITIONAL ARCH RIB JOINT DETAILS SEE SHEETS NO. 84 THRU 87.

ARCH - SPAN
 TOP LATERAL BRACING
 FAI ROUTE 280 SECTION 81-1B
 1-280 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 11 + 11.38 TO STA. 83 + 04.38
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]

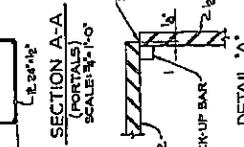
LAYOUT OF TOP LATERAL BRACING
 SCALE: 3/8" = 1'-0"



SECTION B-B
 (STRUTS)
 SCALE: 3/8" = 1'-0"



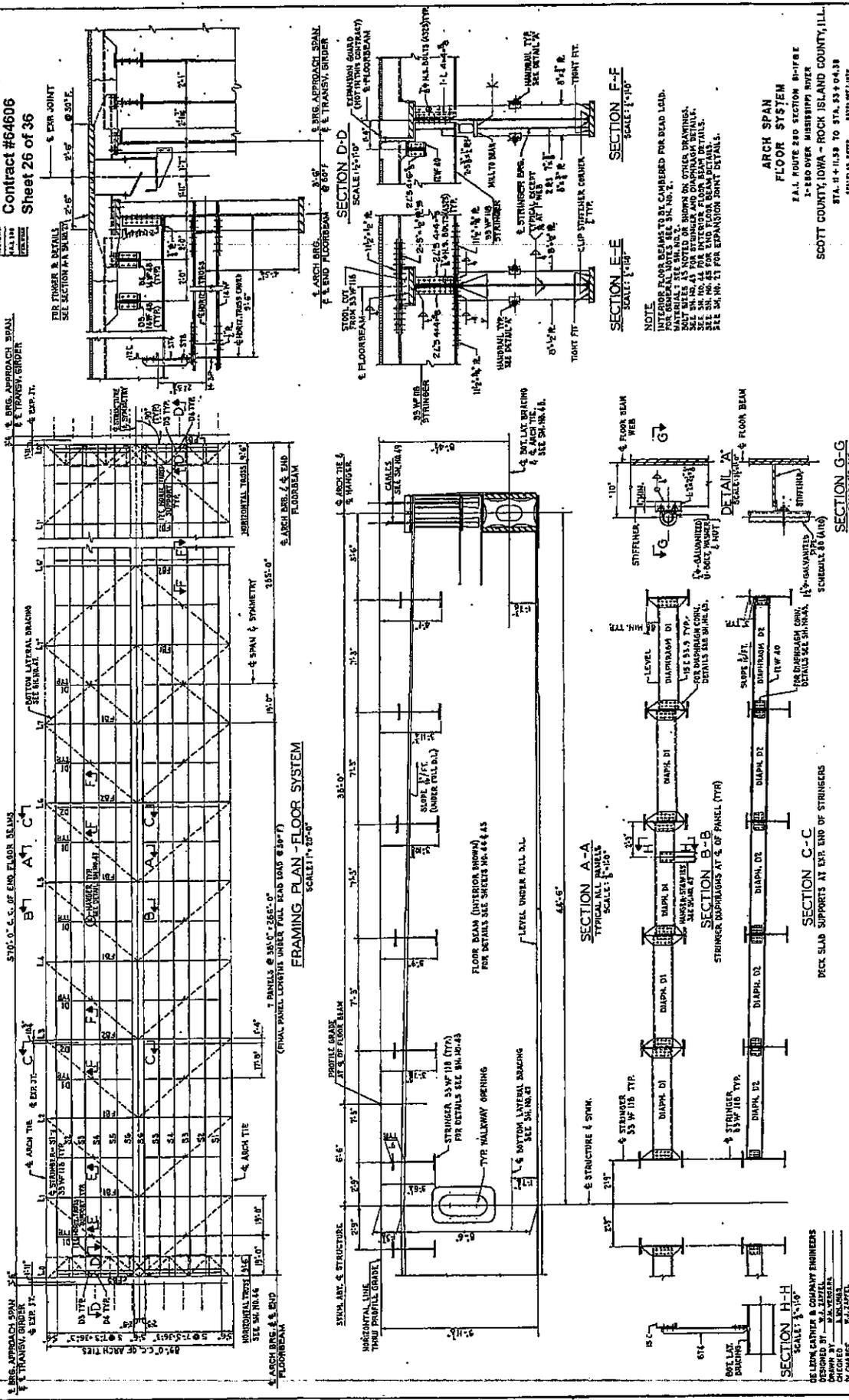
SECTION C-C
 (DIAGONALS)
 SCALE: 3/8" = 1'-0"



DELIVER DRAWING IN SEPARATE ENVELOPES
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]

FAI Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #64606
 Sheet 26 of 36

FOR INFORMATION ONLY



SECTION D-D
 SCALE 1/2" = 1'-0"

SECTION E-E
 SCALE 1/2" = 1'-0"

SECTION F-F
 SCALE 1/2" = 1'-0"

SECTION G-G
 SCALE 1/2" = 1'-0"

SECTION H-H
 SCALE 1/2" = 1'-0"

SECTION A-A
 TYPICAL ALL PANELS
 SCALE 1/2" = 1'-0"

SECTION B-B
 STRINGER SUPPORTS AT & OF PANEL (TYP)
 SCALE 1/2" = 1'-0"

SECTION C-C
 PECK SLAB SUPPORTS AT EXT. END OF STRINGERS
 SCALE 1/2" = 1'-0"

DETAIL A
 SCALE 1/2" = 1'-0"

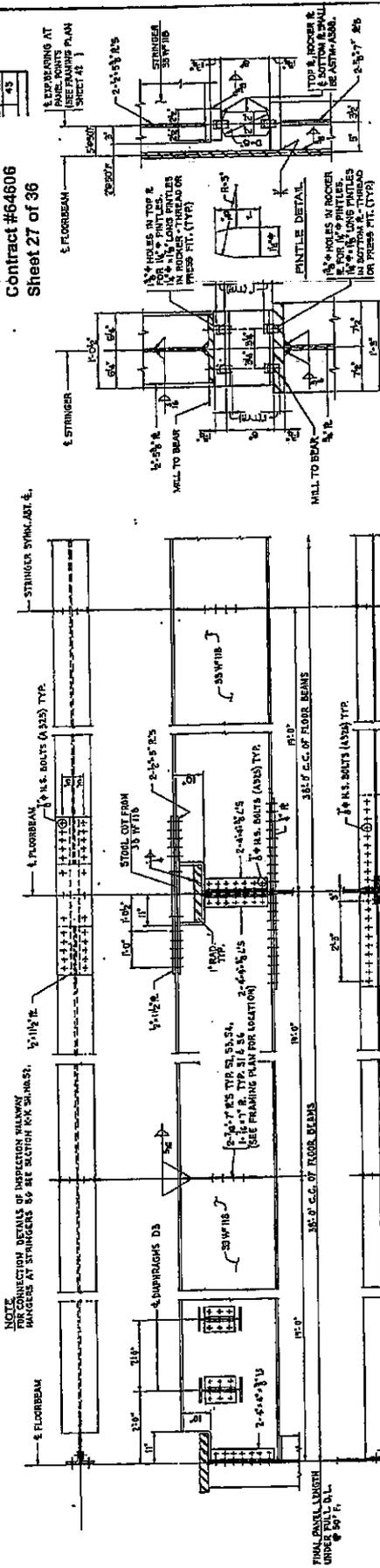
ARCH SPAN FLOOR SYSTEM
 I-150 OVER MISSISSIPPI RIVER
 STA. 11+15.38 TO STA. 13+04.33
 SHEET 26 OF 36

NOTE: FLOOR BEAMS SHALL BE CAMBERED FOR DEAD LOAD. THE GENERAL NOTES ON SHEET 25 OF THIS CONTRACT SHALL APPLY TO THIS SHEET. SEE SHEET 25 FOR INTERIOR FLOOR BEAM DETAILS. SEE SHEET 25 FOR INTERIOR FLOOR BEAM DETAILS. SEE SHEET 25 FOR INTERIOR FLOOR BEAM DETAILS. SEE SHEET 25 FOR INTERIOR FLOOR BEAM DETAILS.

DESIGNED BY: J. J. ZETTEL
 CHECKED BY: J. J. ZETTEL
 IN CHARGE: J. J. ZETTEL
 APPROVED: J. J. ZETTEL

FBI Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #64806
 Sheet 27 of 36

FOR INFORMATION ONLY



STRINGER EXPANSION BEARING DETAILS
 SCALE: 1/8" = 1'-0"

STRINGERS (S1 THRU S6 TYP.)
 PANELS L1-L1, L1-L2, & L2-L3
 SCALE: 1/8" = 1'-0"

STRINGERS (S1 THRU S6 TYP. EXCEPT AS NOTED)
 PANELS L0-L1, L1-L2, L2-L3, & L3-L4
 SCALE: 1/8" = 1'-0"

STRINGERS (S1 THRU S6 EXCEPT AS NOTED)
 PANELS L2-L3, L3-L4, L4-L5, & L5-L6
 SCALE: 1/8" = 1'-0"

DIAPHRAGM D3 ON D4
 SCALE: 1/8" = 1'-0"

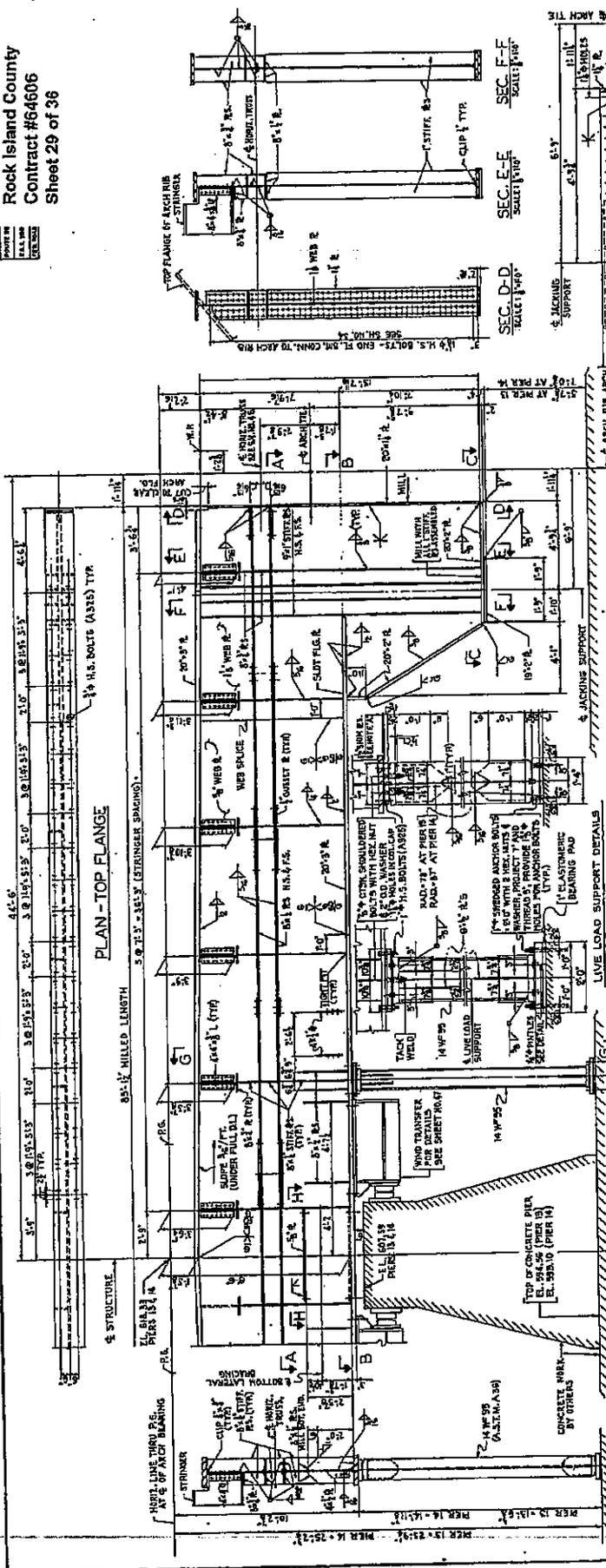
NOTE
 ALL DIMENSIONS AS NOTED AND SHOWN ON OTHER SHEETS.
 ALL STRUCTURAL STEEL FOR STRINGERS SHALL BE ASTM A 36.
 EXCEPT STRINGER EXPANSION BEARING ASSEMBLY SHALL BE ASTM A 572.
 PANEL LINERS UNDER FLOOR DECK SHALL BE 1/2" THICK GALV. STEEL.
 UNDER FLOOR DECK SHALL BE 1/2" THICK GALV. STEEL.
 UNDER FLOOR DECK SHALL BE 1/2" THICK GALV. STEEL.
 UNDER FLOOR DECK SHALL BE 1/2" THICK GALV. STEEL.
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 UNDER FLOOR DECK SHALL BE 1/2" THICK GALV. STEEL.
 UNDER FLOOR DECK SHALL BE 1/2" THICK GALV. STEEL.

ARCH SPAN
 STRINGERS

FBI ROUTE 280 SECTION 81-1B P-2
 I-240 OVER MASSIPPI RIVER
 STA. 11+8.128 TO STA. 13+04.38
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 SCALE: 1/8" = 1'-0" DATE: 06/11/09

DE LIND, GARDNER & COMPANY ENGINEERS
 DESIGNED BY: W.A. WATKINS
 CHECKED BY: J. HUNTER
 IN CHARGE: W.A. WATKINS
 APPROVED: W.A. WATKINS

FOR INFORMATION ONLY



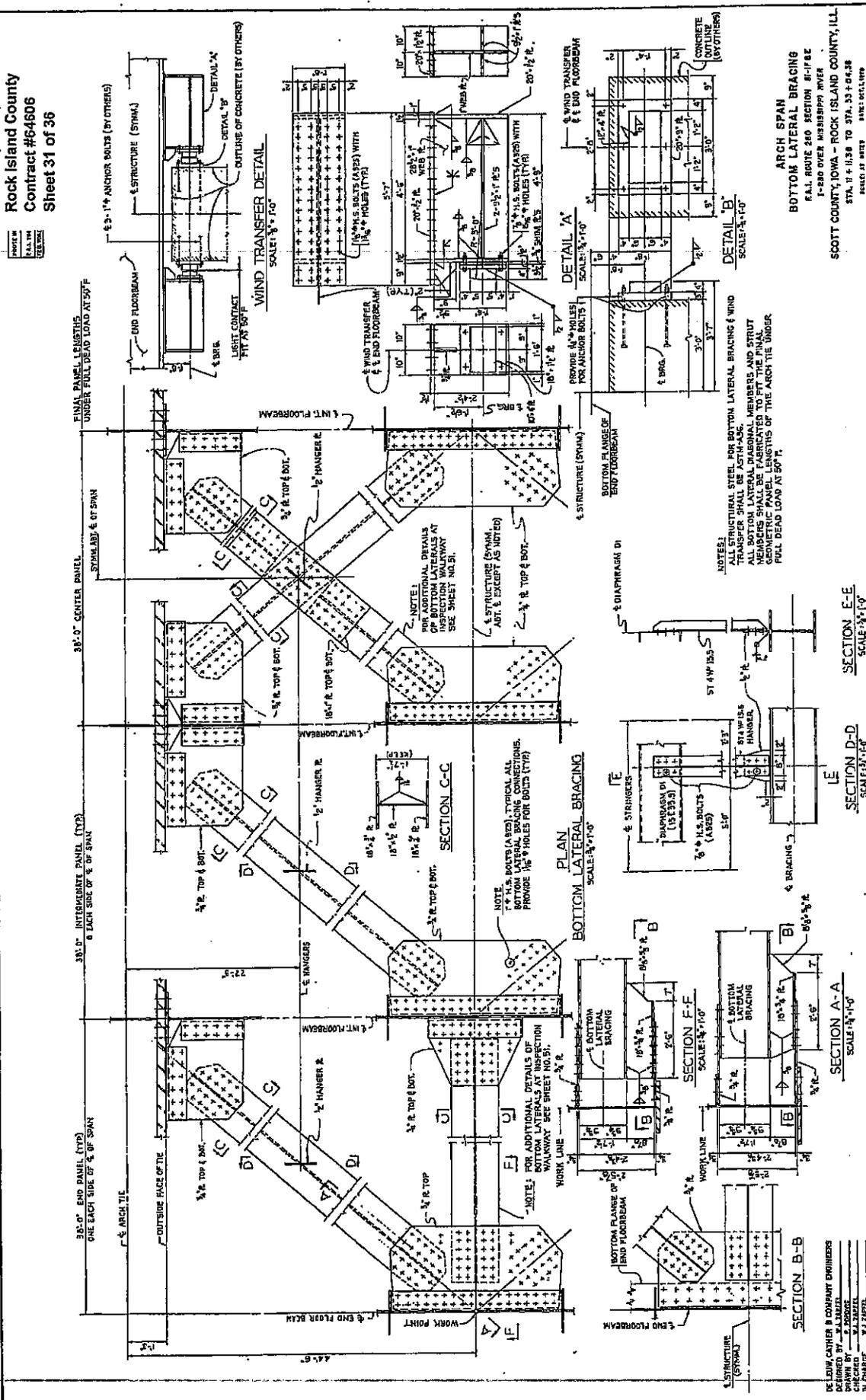
NOTE: ALL STRUCTURAL STEEL SHALL BE A36/A588 UNLESS OTHERWISE NOTED. BOLT SIZES AS NOTED AND AS SHOWN ON OTHER DRAWINGS.

NOTE: A CONTRACTOR FOR THIS SECTION SHALL FURNISH SHIM PLATES OF VARYING THICKNESS, THESE SHIMS SHALL BE PLACED UNDER THE JOIST JOISTS OF THE DECK (SEE CONTRACT SECTION D-10) AFTER CONCRETE DECK AND WEARING SURFACE HAVE BEEN PLACED. FLOOR BEAM FLANGE MUST BEAR ON SHIM PLATE.

ARCH SPAN
 END FLOOR BEAMS
 FALL WHITE RID SECTION B-F & E
 1-240 OVER MAXIMUM RISE
 STA. 11 + 11.39 TO STA. 93 + 04.36
 SCALE AS SHOWN
 DATE: 05/14/08

DESIGNED BY: M. J. BEITEL
 DRAWN BY: M. J. BEITEL
 CHECKED BY: M. J. BEITEL
 IN CHARGE: M. J. BEITEL
 SCALE: 1/4" = 1'-0"

FOR INFORMATION ONLY

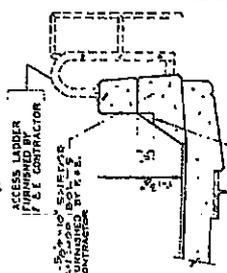
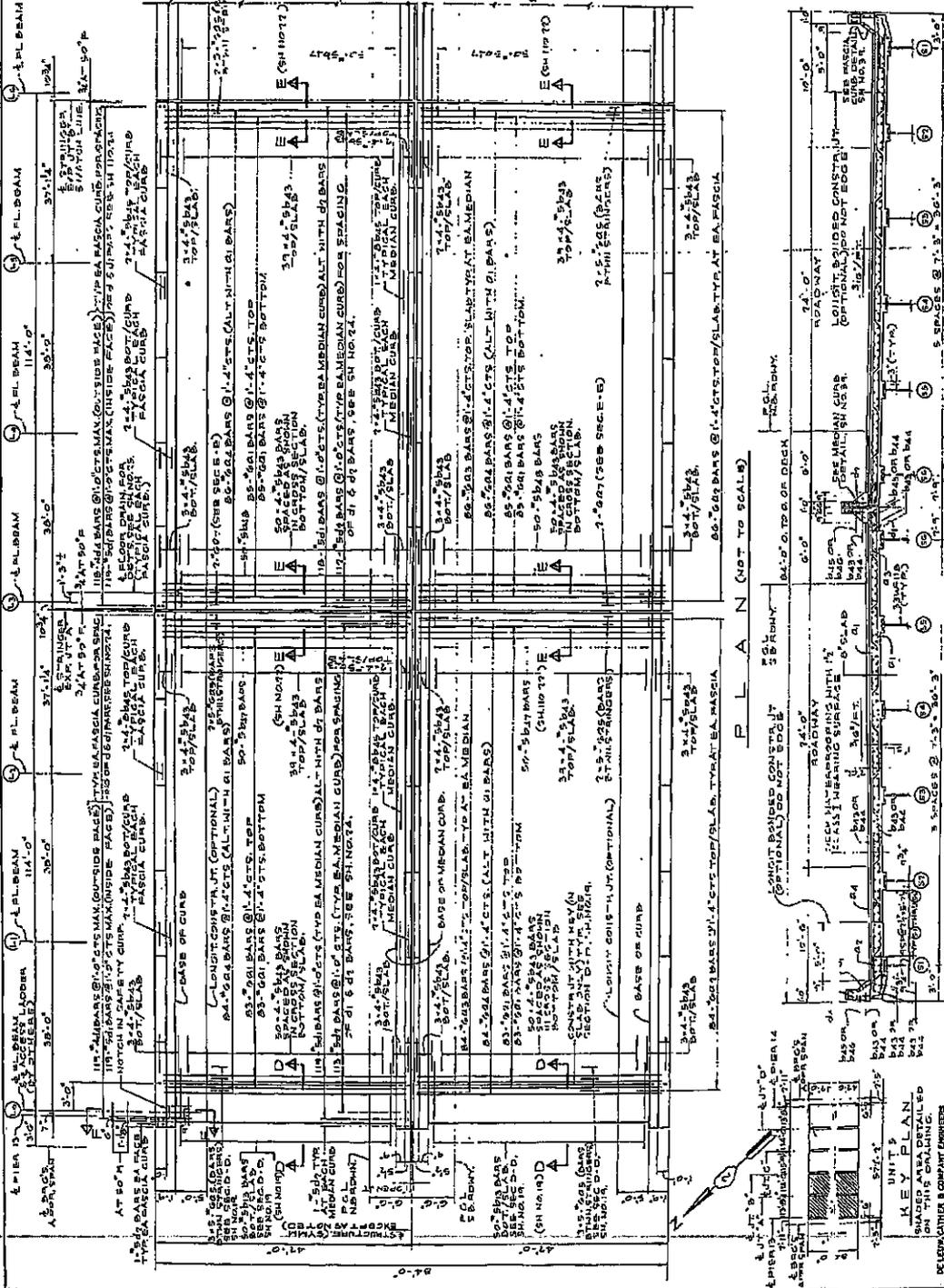


ARCH SPAN
 BOTTOM LATERAL BRACING
 FALL ROUTE 280 SECTION 81-1B2
 I-280 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 17+01.38 TO STA. 33+04.38
 SCALE: AS SHOWN DATE: 05/11/09

DE LOUI, CARTER & COMPANY ENGINEERS
 DESIGNED BY: J. SAMUEL
 DRAWN BY: J. SAMUEL
 CHECKED BY: J. SAMUEL
 IN CHARGE: J. SAMUEL
 APPROVED: K. MOSE

FOR INFORMATION ONLY

FBI Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #64606
 Sheet 34 of 36



SECTION F-F
 SCALE 3/4"=1'-0"

UNIT 5		REINFORCING SEQUENCE	
NO.	DESCRIPTION	NO.	DESCRIPTION
1	4	5	3
1	4	5	3

The deck concrete pour shall be made simultaneously on each side of the longitudinal joint. The reinforcement shall be placed in its position before the concrete is placed. The contractor may place the reinforcement in its position on either side of the structure.

NOTES:
 1. DESIGNATES & DE FLOOR BEAM AND PANEL POINT OF THE ARCH SPAN, THROUGH THE SHEET WITH SHINING THROUGH HOLES.

UNIT 5
 SUPERSTRUCTURE-UNIT 5
 SPAN 14 PART 1 OF 3
 FBI ROUTE 280 SECTION 81-1B
 1-80 OVER MISSISSIPPI RIVER
 STA. 11+11.38 TO STA. 13+04.38
 DATE: 10/16/07

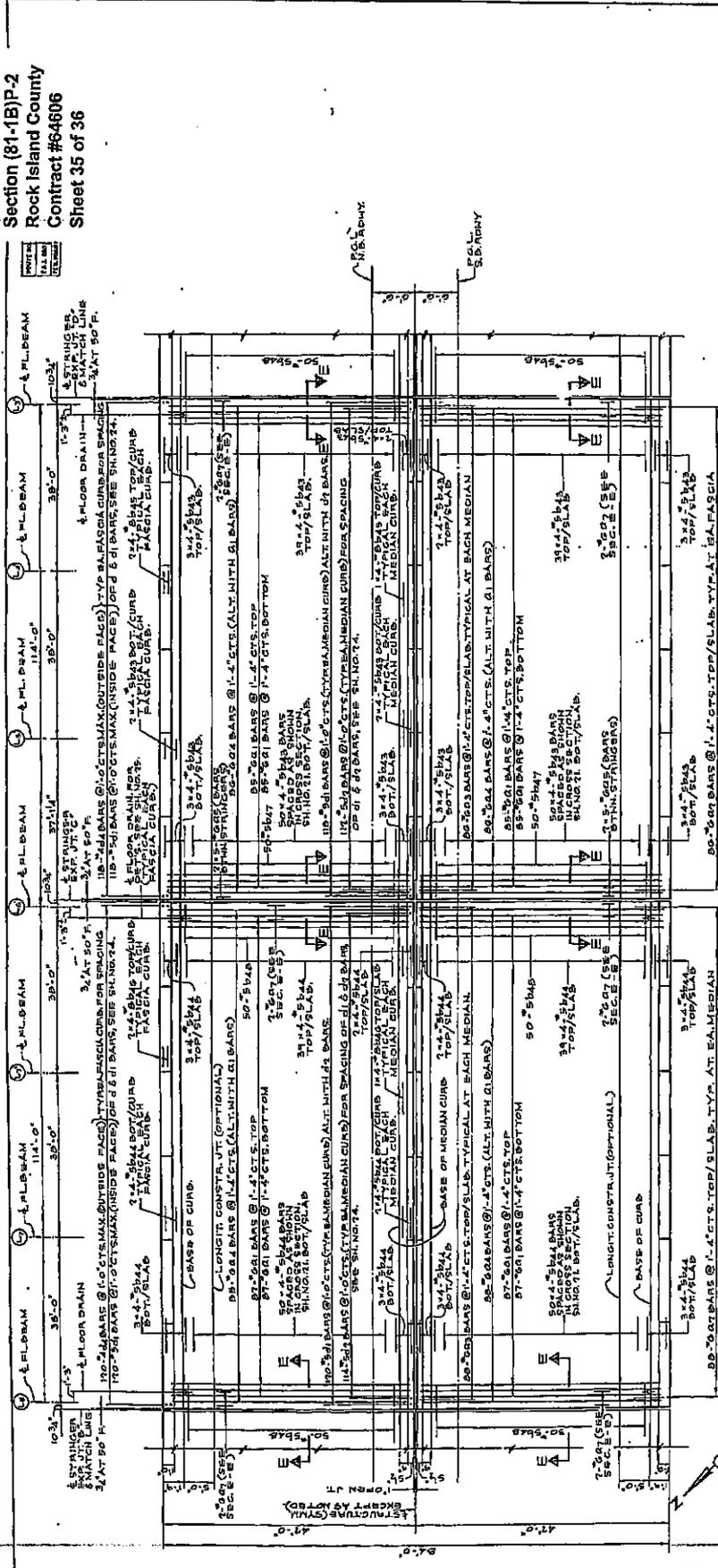
CROSS SECTION (LOOKING NORTH) SCALE: 1/2"=1'-0"

6-2375-001 (REV) 10/16/07

KEY PLAN
 SHADED AREA DETAILED ON THIS DRAWING.
 DESIGNER: [Name]
 DRAWN BY: [Name]
 IN CHARGE: [Name]
 APPROVED: [Signature]

FBI Route 280
 Section (81-1B)P-2
 Rock Island County
 Contract #64606
 Sheet 35 of 36

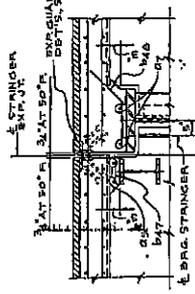
FOR INFORMATION ONLY



NOTES:
 1. DESIGNATES END OF FLOOR BEAM AND LABEL POINT OF THE ARCH SPAN.
 2. THIS SHEET WITH SHEETS 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

SUPERSTRUCTURE - UNITS
 SPAN: PART 2 OF 3
 I-240 OVER MISSISSIPPI RIVER
 SCOTT COUNTY, IOWA - ROCK ISLAND COUNTY, ILL.
 STA. 11+0.38 TO STA. 13+0.38
 DRAWN BY: [Name]
 DATE: [Date]

PLAN (NOT TO SCALE)



KEY PLAN
 THIS PLAN IS TO BE USED IN THIS DRAWING.
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]
 DATE: [Date]

ILLINOIS DEPARTMENT OF LABOR

PREVAILING WAGES FOR ROCK ISLAND COUNTY EFFECTIVE OCTOBER 2006

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.

Rock Island County Prevailing Wage for October 2006

Trade Name	RG	TYP	C	Base	FRMAN	*M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng
=====	==	==	=	=====	=====	=====	==	==	=====	=====	=====	=====
ASBESTOS ABT-GEN		BLD		21.910	22.410	1.5	1.5	2.0	5.450	4.000	0.000	0.600
ASBESTOS ABT-GEN		HWY		22.710	23.710	1.5	1.5	2.0	5.450	4.000	0.000	0.600
ASBESTOS ABT-MEC		BLD		18.750	19.750	1.5	1.5	2.0	4.750	2.000	0.000	0.000
BOILERMAKER		BLD		28.970	31.970	2.0	2.0	2.0	8.020	6.600	0.000	0.210
BRICK MASON		BLD		24.300	25.550	1.5	1.5	2.0	6.250	4.750	0.000	0.360
CARPENTER		BLD		24.750	25.990	1.5	1.5	2.0	5.700	5.160	0.000	0.400
CARPENTER		HWY		24.920	26.670	1.5	1.5	2.0	5.860	4.760	0.000	0.400
CEMENT MASON		BLD		22.840	23.840	1.5	1.5	2.0	5.200	5.300	0.000	0.250
CEMENT MASON		HWY		22.610	23.610	1.5	1.5	2.0	5.200	5.400	0.000	0.400
CERAMIC TILE FNSHER		BLD		17.190	0.000	1.5	1.5	2.0	6.250	4.000	0.000	0.210
ELECTRIC PWR EQMT OP		ALL		23.520	0.000	1.5	1.5	2.0	4.750	6.350	0.000	0.120
ELECTRIC PWR GRNDMAN		ALL		19.660	0.000	1.5	1.5	2.0	4.750	5.310	0.000	0.100
ELECTRIC PWR LINEMAN		ALL		29.650	31.430	1.5	1.5	2.0	4.750	8.010	0.000	0.150
ELECTRICIAN		BLD		26.770	28.770	1.5	1.5	2.0	6.130	7.430	0.000	0.310
ELECTRONIC SYS TECH		BLD		19.800	21.400	1.5	1.5	2.0	5.880	4.040	0.000	0.310
ELEVATOR CONSTRUCTOR		BLD		31.840	35.820	2.0	2.0	2.0	7.775	5.090	1.910	0.000
GLAZIER		BLD		23.220	24.610	1.5	1.5	2.0	4.750	3.900	0.000	0.200
HT/FROST INSULATOR		BLD		25.860	27.060	1.5	1.5	2.0	4.300	6.850	0.000	0.300
IRON WORKER		ALL		23.100	24.950	1.5	1.5	2.0	8.040	7.990	0.000	0.420
LABORER		BLD 1		20.410	20.910	1.5	1.5	2.0	5.450	4.000	0.000	0.600
LABORER		BLD 2		21.910	22.410	1.5	1.5	2.0	5.450	4.000	0.000	0.600
LABORER		BLD 3		22.560	23.060	1.5	1.5	2.0	5.450	4.000	0.000	0.600
LABORER		HWY 1		22.210	23.210	1.5	1.5	2.0	5.450	4.000	0.000	0.600
LABORER		HWY 2		22.710	23.710	1.5	1.5	2.0	5.450	4.000	0.000	0.600
LABORER		HWY 3		23.340	24.340	1.5	1.5	2.0	5.450	4.000	0.000	0.600
LATHER		BLD		24.750	25.990	1.5	1.5	2.0	5.700	5.160	0.000	0.400
MACHINIST		BLD		36.890	38.890	2.0	2.0	2.0	4.380	5.650	2.550	0.000
MARBLE FINISHERS		BLD		17.190	0.000	1.5	1.5	2.0	6.250	4.000	0.000	0.210
MARBLE MASON		BLD		21.530	22.030	1.5	1.5	2.0	6.250	4.000	0.000	0.210
MILLWRIGHT	N	BLD		32.000	35.200	1.5	1.5	2.0	6.100	9.250	0.000	0.560
MILLWRIGHT	S	BLD		25.000	26.700	1.5	1.5	2.0	5.550	7.730	0.000	0.560
OPERATING ENGINEER		BLD 1		25.800	0.000	1.5	1.5	2.0	5.650	5.500	1.500	0.400
OPERATING ENGINEER		BLD 2		25.800	0.000	1.5	1.5	2.0	5.650	5.500	1.500	0.400
OPERATING ENGINEER		BLD 3		23.150	0.000	1.5	1.5	2.0	5.650	5.500	1.500	0.400
OPERATING ENGINEER		BLD 4		23.150	0.000	1.5	1.5	2.0	5.650	5.500	1.500	0.400
OPERATING ENGINEER		BLD 5		22.100	0.000	1.5	1.5	2.0	5.650	5.500	1.500	0.400
OPERATING ENGINEER		HWY 1		25.800	26.800	1.5	1.5	2.0	5.650	5.500	1.500	0.400
OPERATING ENGINEER		HWY 2		25.800	26.800	1.5	1.5	2.0	5.650	5.500	1.500	0.400
OPERATING ENGINEER		HWY 3		24.200	26.800	1.5	1.5	2.0	5.650	5.500	1.500	0.400
OPERATING ENGINEER		HWY 4		24.200	26.800	1.5	1.5	2.0	5.650	5.500	1.500	0.400
OPERATING ENGINEER		HWY 5		23.050	26.800	1.5	1.5	2.0	5.650	5.500	1.500	0.400
PAINTER		ALL		23.470	24.470	1.5	1.5	1.5	4.650	4.850	0.000	0.600
PAINTER OVER 30FT		ALL		24.720	25.720	1.5	1.5	1.5	4.650	4.850	0.000	0.600
PAINTER PWR EQMT		ALL		23.970	24.970	1.5	1.5	1.5	4.650	4.850	0.000	0.600
PILEDRIVER		BLD		24.750	25.990	1.5	1.5	2.0	5.700	5.160	0.000	0.400
PILEDRIVER		HWY		24.920	26.670	1.5	1.5	2.0	5.860	4.760	0.000	0.400
PIPEFITTER		ALL		30.270	33.300	1.5	1.5	2.0	4.750	7.710	0.000	0.510
PLASTERER		BLD		25.900	27.450	1.5	1.5	2.0	4.000	4.400	0.000	0.100
PLUMBER		ALL		30.270	33.300	1.5	1.5	2.0	4.750	7.710	0.000	0.510
ROOFER		BLD		22.850	24.100	1.5	1.5	2.0	5.840	4.870	0.000	0.190
SHEETMETAL WORKER		BLD		27.300	29.000	1.5	1.5	2.0	6.040	7.300	0.000	0.380
SPRINKLER FITTER		BLD		31.240	33.240	1.5	1.5	2.0	6.500	5.350	0.000	0.250
STONE MASON		BLD		24.300	25.550	1.5	1.5	2.0	6.250	4.750	0.000	0.360
TERRAZZO FINISHER		BLD		17.190	0.000	1.5	1.5	2.0	6.250	4.000	0.000	0.210
TERRAZZO MASON		BLD		21.530	22.030	1.5	1.5	2.0	6.250	4.000	0.000	0.210
TILE LAYER		BLD		24.750	25.990	1.5	1.5	2.0	5.700	5.160	0.000	0.400
TILE MASON		BLD		21.530	22.030	1.5	1.5	2.0	6.250	4.000	0.000	0.210
TRUCK DRIVER		ALL 1		25.930	0.000	1.5	1.5	2.0	7.250	3.425	0.000	0.000

TRUCK DRIVER	ALL	2	26.333	0.000	1.5	1.5	2.0	7.250	3.425	0.000	0.000
TRUCK DRIVER	ALL	3	26.530	0.000	1.5	1.5	2.0	7.250	3.425	0.000	0.000
TRUCK DRIVER	ALL	4	26.780	0.000	1.5	1.5	2.0	7.250	3.425	0.000	0.000
TRUCK DRIVER	ALL	5	27.530	0.000	1.5	1.5	2.0	7.250	3.425	0.000	0.000
TRUCK DRIVER	O&C	1	20.740	0.000	1.5	1.5	2.0	7.250	3.425	0.000	0.000
TRUCK DRIVER	O&C	2	21.060	0.000	1.5	1.5	2.0	7.250	3.425	0.000	0.000
TRUCK DRIVER	O&C	3	21.220	0.000	1.5	1.5	2.0	7.250	3.425	0.000	0.000
TRUCK DRIVER	O&C	4	21.420	0.000	1.5	1.5	2.0	7.250	3.425	0.000	0.000
TRUCK DRIVER	O&C	5	22.020	0.000	1.5	1.5	2.0	7.250	3.425	0.000	0.000
TUCKPOINTER	BLD		24.300	25.550	1.5	1.5	2.0	6.250	4.750	0.000	0.360

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

ROCK ISLAND COUNTY

MILLWRIGHT (SOUTH) - South of Interstate 80.

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

Installing, assembling and maintaining sound and intercom, protection alarm (security), master antenna television, closed circuit television, computer hardware and software programming and installation to the network's outlet and input (EXCLUDING all cabling, power and cable termination work historically performed by wiremen), door monitoring and control, nurse and emergency call programming and installation to the system's outlet and input (EXCLUDING all cabling, power and cable termination work historically performed by wiremen), clock and timing; and the installation and maintenance of transmit and receive antennas, transmitters, receivers, and associated apparatus which operates in conjunction with the above systems. All work associated with these system installations will be included EXCEPT (1) installation of protective metallic conduit, excluding less than ten-foot runs strictly for protection of cable, and (2) 120 volt AC (or higher) power wiring and associated hardware.

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, HEAVY AND HIGHWAY CONSTRUCTION

Class 1. An engineer on Crane, Shovel, Clamshell, Dragline, Backhoe, Derrick, Tower Crane, Cable Way, Concrete Spreader (servicing two pavers), Asphalt Spreader, Asphalt Mixer, Plant Engineer, Dipper Dredge Operator, Dipper Dredge Craneman, Dual Purpose Truck (boom or winch), Leverman or Engineman (hydraulic dredge), Mechanic, Paving Mixer with tower attached, Pile Driver, Boom Tractor, Stationary, Portable or Floating Mixing Plant, Trenching Machine (over 40 H.P.), Building Hoist (two drums), Hot Paint Wrapping Machine, Cleaning and Priming Machine, Backfiller (throw bucket), Locomotive Engineer, Qualified Welder, Tow or Push Boat, Concrete Paver, Seaman Trav-L-Plant or similar machines, CMI Autograder or similar machines, Slip Form Paver, Caisson Augering Machine, Mucking Machine, Asphalt Heater-Planer Unit, Hydraulic Cranes, Mine Hoists.

Class 2. An engineer on Athey, Barber-Green, Euclid or Haiss Loader, Asphalt Pug Mill, Fireman and Drier, Concrete Pump, Concrete Spreader (servicing one paver) Bulldozer, Endloader, Log Chippers or similar machines, Elevating Grader, Group Equipment Greaser, LeTourneaupul and similar machines, off-road haul units, DW-10 Hyster Winch and similar machines, Motor Patrol, Power Blade, Push Cat, Tractor Pulling elevating Grader or Power Blade, Tractor Operating Scoop or Scraper, Tractor with Power Attachment, Roller on Asphalt or Blacktop, Single Drum Hoist, Jaeger Mix and Place Machine, Pipe Bending Machine, Flexaplane or similar machines, Automatic Curbing Machines, Automatic Cement and Gravel Batch Plants (one stop set-up), Seaman Pulvi-Mixer or similar machines, Blastholer Self-propelled Rotary Drill or similar machines, Work Boat, Combination Concrete Finishing Machine and Float, Self-propelled Sheep Foot Roller or Compactor (used in conjunction with a Grading Spread), Asphalt Spreader Screed Operator, Apsco spreader or similar machine, Slusher, Forklift (over 6000 lb. cap. or working at heights above 28 ft.) Concrete Conveyors, Chip Spreader, Underground Boring Machine (BUILDING ONLY), Straddle Carrier, Hydro-Hammer (BUILDING ONLY), Hydraulic Pumps or Power Units Driven by any power source (except manually), used to hoist or lift machinery or material.

Class 3. An engineer on Asphalt Booster, Fireman and Pump Operator at Asphalt Plant, Mud Jack, Underground Boring Machine (HIGHWAY ONLY), Concrete Finishing Machine, Form Grader with Roller on Earth, Mixers (3 bag to 16E), Power Operated Bull Float, Tractor without Power attachment, Dope Pot (agitating motor), Dope Chop Machine, Distributor (back end), StraddleCarrier, Portable Machine Fireman, Hydro-Hammer (HIGHWAY ONLY), Power Winch on Paving Work, Self-propelled Roller or Compactor (other than provided for above), Pump Operator (more than one well-point pump), Portable Crusher Operator, Trench Machine (under 40 H.P.), Power Subgrader (on forms) or similar machines, Forklift (6000 or less cap.) Gypsum Pump, Conveyor over 20 H.P., Fuller Kenyon Cement Pump or similar machines.

Class 4. An engineer on Air Compressor (400 c.f.m. or over HIGHWAY ONLY), Light Plant, Mixers (1 or 2 bag), Power Batching Machine (Cement Auger or Conveyor), Boiler (Engineer or Fireman), Water Pumps (HIGHWAY ONLY), Mechanical Broom, Automatic Cement and Gravel Batch Plants (two or three stop set-up), Small Rubber-tired Tractors (not including backhoes or endloaders), Self-propelled Curing Machine, Brush Chipper, Driver on Truck Crane or similar machines.

Class 5. Oiler, Mechanic's Helper, Mechanical Heater (other than steam boiler), Belt Machine, Small Outboard Motor Boats (Safety Boat and Life Boat), Engine Driven Welding Machine, and Small Tractors

(used to unroll or roll wire mesh), Water pumps (BUILDING ONLY), Air Compressors (BUILDING ONLY), Permanent Automatic Elevators.

LABORER - BUILDING

Class 1: General laborer, carpenter tender, tool cribman, salamander tender, flagman, form handler, floor sweeper, material handler, fencing laborer, cleaning lumber, landscaper, unloading explosives, laying of sod, planting/removal of trees, wrecking laborer, unloading of Re-Bars, scaffold worker, signal man on crane.

Class 2: Handling of materials treated with creosote, kettle men, prime mover or motorized unit used for wet concrete or handling of building materials, vibrator operator, mortar mixer, power tools used under the jurisdiction of laborers, sand points, gunnite nozzle men, welders, cutters, burners and torchmen, chain saw operator, jackhammer and drill operators, paving breakers, air tamping hammerman, concrete saw operator, concrete burning machine operator, coring machine operator - hod carrier and plasterer tender.

Class 3: Caisson worker after 6 foot depth, dynamite man, asbestos abatement worker, tunnel miners - mixerman (plaster only), pump man.

LABORER - HEAVY & HIGHWAY

Class 1: Rod or chain man, flagman, dumpman, spotter, broom man, landscaper, planting and removal of trees, fencing laborers, dispatcher, ticket writer, scaleman, cleaning of forms or lumber (in bone yard), laying of sod, moving and/or maintenance of flares and barricades.

Class 2: Operation of all hand, electric, air, hydraulic or mechanically powered tools under the jurisdiction of Laborers' including jackhammers, tempers, air spades, augers, concrete saws, chain saws, utility saws, rock drills, vibrators, mortar mixer, power and hand saw (when clearing timber) general laborer (not elsewhere covered), craft-tender, material checker, material handler, form handler, concrete dumper, puddler, form setter helper, explosives handler, dynamite helper, center strip, reinforcing in concrete, wire mesh handler and installer, prime mover or any mechanical device taking the place of concrete buggy or wheelbarrow, sandpoint setter, asphalt kettleman. Sheeting hammer drivers, laying and jointing of telephone conduit, gas distribution men, pipe setter on laterals, drain tiles, culvert pipe, and storm sewer catch basin leads, catch basins, manholes, batch dumpers, tank cleaners, cofferdam workers, bankman on floating plant, jointman with pipelayers. Back-up man (corker, joint maker) with pipe setter on sewer and water mains, batterboard man or laser operator on sewer and water main, labor in ditch, or tunnel, on sewer or water mains and telephone conduit. Cutters, burners, torchman, gravel box man, asphalt plant laborers, concrete plant laborer, deck hand, unloading of steel and rebar, laser beam operator, wrecking laborers.

Class 3: Asphalt raker or luteman, head form setter, head dynamite man (powderman) head string or wireline man (on paving), pipe setter on sewer or water main, gunnite nozzle man, asphalt or concrete curb machine operator, head grade man, head tunnel miner, concrete burning machine operator, coring machine operator, welder.

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.