

**Project Number: 050056**

**PID #: 18702**

Summit

IR 77-8.86 (Swartz Rd.)

E034(720)

Certification Acceptance Project

Bridge Replacement (1 Bridge)

THE 2002 CONSTRUCTION AND MATERIAL SPECIFICATION BOOK IS PART OF THE  
BIDDING DOCUMENTS ON THIS PROJECT

# PROPOSAL

STATE OF OHIO

## DEPARTMENT OF TRANSPORTATION

Gordon Proctor, Director

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**January 26, 2005**

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DO NOT SUBMIT MORE THAN ONE BID PROPOSAL FOR EACH BID  
(EXACT PREQUALIFICATION NAME AND STREET ADDRESS MUST APPEAR BELOW)

Submitted by \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

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

Bidder Id \_\_\_\_\_

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**TITLE VI RELATED STATUTES NON-DISCRIMINATION STATEMENT**

The Ohio Department of Transportation, under Title VI of the Civil Rights Act and related statutes, ensures that no person in the Department of Transportation, shall on the grounds of race, color, national origin, sex, disability or age be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

**NOTICE TO BIDDERS**

**Prequalification**

Bidders must apply for prequalification with the Department's Office of Contracts, Contractor Qualifications Section, at least 30 days before the date set to open bids.

**Certificate of Compliance with Affirmative Action Programs**

No contract shall be entered into unless the bidder possesses a valid Certificate of Compliance with Affirmative Action Programs, issued by the State EEO Coordinator, Certification Section, 77 South High Street, 24th Floor, Columbus, Ohio 43215, dated no earlier than 180 days prior to the date fixed for the opening of bids.

**PREPARATION OF PROPOSAL (05-14-01)  
ELECTRONIC BIDDING REQUIREMENTS**

1. No Handwritten Bids.

The Department will not accept handwritten bids or bids generated electronically from software other than that used and supplied by the Department. All handwritten bids and bids generated electronically from software other than that used and supplied by the Department shall be considered non-responsive and ineligible for award. The Department will only accept and consider bids that have been produced from the Department's electronic bidding software.

2. Bidders MUST Use ODOT Electronic Bidding Software (EBS).

Bidders must prepare and submit their bids electronically and must use the EBS Software furnished by the Department of Transportation. The Department will furnish the bidder with the necessary EBS Software to install on their computers through the ODOT Web Site on the Office of Contracts' Web Page.

3. Bidders MUST Submit All Bid Prices on 3½ " Diskette.

Bidders also must use EBS to prepare and print out a hard copy of their Bid Item Schedules and submit the hard copy with the electronic disk containing that same schedule. The disk shall be marked with the bidder's name and all call order numbers for the project upon which the bidder is bidding. These shall be no more than one set of Bid Item Schedules and bid prices for each disk. Therefore, each project bid must have its own disk.

4. The Department Will Provide Bidders With the Following:

The Department shall provide planholders with all of the hard copy documents as previously provided for by the Office of Contract.

<b>Electronic Items Provided on Web Page</b>	<b>Hard Copy Bid Package</b>

Electronic Items Provided on Web Page	Hard Copy Bid Package
EBS Files	Proposal (2)
Addenda for Estimated Quantity Changes	Plans
Addenda (Actual Text That Is Mailed Out)	Bid Envelope
Bid Bond	Bid Bond (2)
Supplemental Questionnaire	Supplemental Questionnaire
	Remote Bidding (Envelope and Total Sheets)
	Addenda (If Any)

5. Electronic Bids MUST comply with all Existing bidding documents.

Electronic bids must comply with all special provisions, the Standard Specifications for Highway Construction, Supplemental Specifications to the Standard Specifications for Highway Construction, and the Rules and Regulations of the Ohio Department of Transportation regarding bid preparation and bid submittal.

6. Bidders MUST submit the following:

Completed and Executed Bid Proposal	Bid Guaranty
EBS Disk (3½")	Supplemental Questionnaire
EBS Bid - Printed Hard Copy	Addenda (If Any)

**\*NOTE: In addition to diskette, a completed and executed bid proposal will be required.**

7. Blank Unit Prices Will NOT Be Permitted

Blank unit prices will be considered an invalid bid **EXCEPT** in the case of optional designs (where the bidder is required to bid on only one of those designs). Unit prices of zero are not permitted at any time.

8. Discrepancy Between Information on Disk and Bid Item Pages Submitted.

In the event there is a discrepancy between the information submitted on the disk and the bid item pages submitted with the proposal, the figures on the bid item pages will govern.

9. All addenda must be acknowledged in your bid in order for your bid to be considered for award of a project. Acknowledgement means that the first page of an addendum must be included in your bid. Failure to incorporate changed quantities or items in your EBS submissions will result in the rejection of your bid.

*Investigation:*

The Director may conduct such investigation as he deems necessary in order to assist in the evaluation of any bid.

*Supplemental Questionnaire:*

Blank Supplemental Questionnaires, furnished with each proposal, must be filled out and attached to each bid submitted. Failure to complete and furnish the Supplemental Questionnaire will result in the rejection of your bid.

*Bid Guaranty - (Payable to The "Director of Transportation"):*

Each bidder is required to file with his bid a certified check or cashier's check for an amount equal to five percent (5%) of his bid, but in no event more than fifty thousand dollars, or a bid bond for ten percent (10%) of his bid payable to the "Director of Transportation."

In the event a bidder chooses to use a bid bond, it must be submitted on the Department's "Bid Bond" form, copies of which are enclosed herewith.

*Bid Bond Form:*

The **ONLY ACCEPTABLE** bid bond form to be used on this project is the form that is included in the proposal package. Any other form submitted with the bid, including, but not limited to a form from another state agency or surety company will render your bid non-responsive and ineligible for award and **WILL** result in your bid being rejected.

*Contract Performance Bond and Payment Bond:*

The successful bidder must furnish a performance bond and a payment bond in an amount equal to one hundred percent (**100%**) of the state's estimate. (Section 5525.16 O.R.C.)

*Addenda:*

Bidders will receive project addenda timely either by express mail or facsimile. In the case where the addendum is faxed, the Office of Contracts will require a verification from each bidder receiving a project addendum or the addendum must be acknowledged in the bid proposal. In the case of verification, the bidder must provide their company name and (legible) signature of the person who received the fax. The bidder must fax the verification to the Office of Contracts. **Failure to acknowledge an addendum received by fax or with the bid will result in the rejection of the bid.** If further information is required, please contact a Customer Service Representative in the Office of Contracts at (614)466-3778 or (800)459-3778. Failure to incorporate changed quantities or items in your EBS submissions will result in the rejection of your bid.

*Time for Submission of Bids:*

Sealed bids for the Ohio Department of Transportation Highway Improvement Projects will be received at the following four (4) locations until **10:00 a.m.** Ohio Standard Time on the day of the letting:

Office of Contracts	1980 West Broad Street, Columbus, Ohio 43223	First Floor
District 2 Office	317 East Poe Road, Bowling Green, Ohio 43402	
District 8 Office	505 South State Route 741, Lebanon, Ohio 45036	Room 117
District 12 Office	5500 Transportation Blvd., Garfield Heights, Ohio 44125	

**Bids must be deposited in the Bid Box of one of the above four (4) locations by 10:00 a.m. on the scheduled day of letting** as listed on the Bidding Proposal. Bidders must allow sufficient time for mailing their bids to ensure delivery to one of the four (4) bidding locations prior to the opening time and date. The Department will not be responsible for a late bid due to the failure of the bidder to allow sufficient time for delivery of the bid.

All bids will be time/date stamped upon receipt by one of the four (4) bidding locations and such shall be the official time/date of receipt. Postmarks, or other times/dates appearing on the bid will not be considered as the official time/date of receipt. Delivery to any other location

within the Department, including the Mail Room or to departmental personnel other than a Customer Service Representative who has authority to receive bids, does not constitute bid being received by the Department.

Bids submitted with insufficient postage will not be accepted. Bids will be received during regular business hours, 7:30 a.m. - 4:30 p.m., Monday through Friday, excluding recognized holidays. **Bids with stamped or copied signatures will be considered non-responsive.** Telegraphic, facsimiles, or any other mode of transmission other than stated above shall not be considered as a valid submission to the Department. Bidders using "express mail" or similar types of service must verify with the service as to which address is required to ensure proper delivery of the response to the Department and **time of delivery**. The Department will not be held liable for non-delivery and/or late delivery of any bid response due to a bidder listing an incorrect address.

Any bid received after 10:00 a.m. on the scheduled day of opening will be marked as late, remain sealed and will receive no further consideration for award. Late bids will be returned to the bidder. Bidders must allow sufficient time for mailing their bids to ensure delivery to the Department prior to the opening time and date. The Department will not be responsible for a late bid due to failure of the bidder to allow sufficient time for delivery of the bid.

Bidders submitting bids in one of the District locations must also submit a sealed white envelope which sets out the project number and firm name on the outside and which contains a completed "Bid Total Sheet" inside. The completed envelope and bid total sheet must be submitted with each bid. This information will be forwarded to and read in the Auditorium, 1980 W. Broad Street, Columbus, Ohio with the bids received in Columbus. The sealed bids received in the District locations will be sent to Columbus and publicly opened in the Office of Contracts, ODOT Central Office Headquarters on the same afternoon of the letting date. **FAILURE TO ATTACH THE WHITE ENVELOPE TO THE SEALED BID SHALL RENDER THE BID NON-RESPONSIVE AND INELIGIBLE FOR AWARD.** The Department shall return that bid to the contractor unopened.

#### **PROMPT PAYMENT**

In accordance with Section 4113.61 of the Ohio Revised Code, the prime contractor shall make payment to each subcontractor and materialman within ten (10) calendar days after receipt of payment from the Ohio Department of Transportation for work performed or materials delivered or incorporated into the public improvement, provided that the pay estimate prepared by the engineer includes work performed or materials delivered or incorporated into the public improvement by the subcontractor or materialman.

The prime contractor shall also require that this contractual obligation be placed in all subcontractor and materialman contracts that it enters into and further require that all subcontractors and materialmen place the same payment obligations in each of their lower tier contracts. If the prime contractor, subcontractors or materialmen subject to this provision fail to comply with the ten (10) day payment requirement, the offending party shall pay, in addition to the payment due, interest in the amount of eighteen percent (18%) per annum of the payment due, beginning on the eleventh (11<sup>th</sup>) day following the receipt of payment from the Department and ending on the date of full payment of the payment due plus interest.

Repeated failures to pay subcontractors and materialmen timely as defined by this statute shall result in a finding that the prime is in breach of contract and subject to all legal consequences that such a finding entails. Further, repeated failures to pay timely as defined by the statute shall result in a lower evaluation score for the prime contractor and those subcontractors who are subject to evaluation.



## **TRUCK LEASING**

The Code of Federal Regulations Title 49, Section 26.55(d)(4)(5)(6) governs trucking operations. This section states that the Disadvantaged Business Enterprise (DBE) may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract. The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE will receive credit for only the fee or commission it receives as a result of the lease agreement. The DBE does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE. The law requires that a lease must indicate that the DBE has exclusive use of and control over the truck for credit to be accorded to the DBE. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

In lieu of a truck owner displaying the name and identification number of the DBE, the truck owner shall be required to furnish a photocopy of the lease agreement. Thereby, fulfilling the rule without causing undue hardship on any entity.

Credit for expenditures with DBEs for materials or supplies toward the DBE goal is described as follows:

1. When the materials or supplies are obtained from a DBE manufacturer the prime contractor may receive credit for 100 percent of the cost of the materials or supplies toward the DBE goal. For purposes of this section, a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
2. When the materials or supplies are purchased from a DBE regular dealer or supplier the prime contractor may receive credit for 60 percent of the cost of the materials or supplies toward the DBE goal. For purposes of this section, a regular dealer or supplier is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

For subcontract agreement (C-92) purposes the following definitions will be used:

Install - DBE contractor who obtains goods, materials and supplies and fixes in place, for use, the same goods, materials and supplies. (e.g., DBE contractor obtains and fixes in place re-bar on project site). Must spend 20% or more time on project per day. 100% credit toward prime's DBE goal.

Stockpiling - DBE Contractor/Trucker who delivers materials, goods, or supplies to project site. 60% credit toward prime's DBE goal.

Tailgating - DBE Contractor/Trucker who delivers and installs materials, goods, or supplies to project site. Must spend 20% or more time on project per day. 100% credit toward prime's DBE goal.

## **PARTNERING AGREEMENT**

It is the intent of the Department to partner every project. Therefore, enter into a cooperative partnership agreement with the Department on each Project. The objective of this agreement is the timely completion of the Work and a quality product that will be a source of pride to both the Department and the Contractor. This Partnering Agreement will not affect the terms and conditions of the Contract. It is a document that is solely intended to establish an environment of cooperation between the parties. The cost of the partnering workshop(s) will be agreed to and shared equally between the Department and the Contractor. The Contractor will pay all costs directly and the Department will authorize its share to the Contractor by Change Order. The Contractor is not entitled to any mark ups on these costs.

## **EARLY COMPLETION PROPOSAL NOTE**

In the event that the Contractor submits a progress schedule that anticipates completion of all work prior to the completion date established by the bidding documents, upon request of the Department the Contractor shall submit a copy of all its bidding documents in accordance with the requirements set out below. Should the Contractor fail to submit bidding documents for escrow, the Contractor has waived consideration by the Department of any claim related to a delay or portion of any delay which causes the Contractor's scheduled completion date to be extended for any period of time up to and including the completion date specified in the bidding documents. In such circumstances, should a delay cause the performance of the work to extend beyond the completion date specified in the bidding documents, the Department shall on any claim for delay consider only that portion of time by which actual completion of the work was extended beyond the completion date specified in the bidding documents.

## **Escrow of Bid Documents**

**1. Scope and Purpose.** The purpose of this subsection is to preserve the Contractor's and subcontractors' Bid Documents for use by the parties in the settlement of disputes and claims.

The Department will not use Escrow Documents to assess the Contractor's or subcontractors' qualifications for performing the Work. The Escrow Documents are, and will always remain, the property of the Contractor or subcontractors, subject to joint review by the Department and Contractor or subcontractors, as provided below.

Escrow Documents consist of one copy of all documents generated in preparation of the Proposal. This includes handwritten notes, records of phone conversations and phone quotes, letters, faxes, e-mails both printed and electronically archived, formal quotations, calculations, work sheets, conceptual progress schedules, marked up plan sheets, and any other paper or electronic record of how the Work was originally bid. These documents will be held in escrow for the duration of the Contract.

Escrow Documents are required under the following circumstances:

a. The accepted progress schedule shows an early completion of the Work more than 10 Calendar Days before the Completion Date and the Contractor has reserved the right to claim compensation for a delay in meeting the early completion. The Contractor may elect not to comply with the escrow requirement for an early completion; however, this will waive the Contractor's rights to claim costs for a delay in meeting the projected early completion.

b. When required by the Contract Documents.

**2. Submittal.** Submit to the Administrator of the Office of Contracts, the required Escrow Documents in a sealed container containing only the Escrow Documents. Clearly mark the

container with the Contractor's and subcontractors' name, date of submittal, project name and number, and the words "Escrow Documents."

Failure to timely provide the required Escrow Documentation will be sufficient cause to default the Contractor according to 108.08. The Contractor and subcontractors are not permitted to perform Work until the required Escrow Documents are submitted. The Department will not grant a time extension for the period of time it takes the Contractor and subcontractors to submit the required Escrow Documents.

**3. Stipulations and Acknowledgements.** The Department stipulates and expressly acknowledges that the Escrow Documents constitute proprietary information. This acknowledgement is based on the Department's expressed understanding that the information contained in the Escrow Documents is not known outside the Contractor's or subcontractors' business, is known only to a limited extent and by a limited number of the Contractor's or subcontractors' employees, and is safeguarded while in the Contractor's or subcontractors' possession. The Department further acknowledges that the Escrow Documents and the information they contain are provided for the joint use of the Contractor or the subcontractors and the Department.

The Contractor and subcontractors agree, as a requirement of the Contract, that the Escrow Documents constitute all the information used in the preparation of the Bid, and that no other Bid preparation information will be considered in the resolution of disputes and claims. The Contractor and subcontractors also agree that nothing in the Escrow Documentation shall change or modify the terms or conditions of the Contract Documents.

The Department further agrees to safeguard the Escrow Documents, and all information they contain, against disclosure to the fullest extent permitted by law.

**4. Format and Contents.** The Contractor and subcontractors may submit Escrow Documents in their usual cost estimating format. It is not the intention of this subsection to cause the Contractor to expend additional effort during Proposal preparation, but to ensure that the Escrow Documents are adequate to enable complete understanding and proper interpretation for their intended use.

Ensure that the Escrow Documents clearly itemize the estimated costs of performing the Work of each contract item in the Proposal. Separate contract items into such items necessary to present a complete and detailed estimate of all costs. Detail the plant, equipment, material, and indirect costs in the Contractor's usual format. Ensure that the allocation of contingencies, mark ups, and other items are identified for each contract item.

Identify all elements of pricing developed solely based on experience or market factors, and for which a detailed cost estimate does not exist.

Identify all costs. For contract items amounting to less than \$10,000, the Contractor may provide estimated costs without a detailed cost estimate.

Ensure that the Escrow Documents include all quantity take-offs, calculations of rates of production and progress, copies of quotes from subcontractors and suppliers, memoranda, narratives, add/deduct sheets, and all other information used by the Contractor to arrive at the prices contained in the Proposal.

**5. Late Revisions.** If the itemized cost breakdowns and allocations described elsewhere are not revised to reflect the final Bid prices, then submit information reconciling the Bid preparation documents and the Bid unit prices. Consider this reconciliation as a part of the Escrow Documents and include in the submittal.

**6. Storage.** The Department will acknowledge receipt of the Escrow Documents and place the Escrow Documents in an institution that is mutually agreed upon by both the Contractor and the Department for the life of the Contract. The Department will pay the cost of storage.

**7. Examination.** The Department, the Contractor, and when necessary, the applicable subcontractors will examine the Escrow Documents, at any time deemed necessary by either the Department or the Contractor, to assist in the negotiation of the settlement of disputes and claims; ensure that subcontractors are present if and when they are presenting a claim through the Contractor or when information is needed. The Contractor, applicable subcontractors, and the Department will be present to review the Escrowed Documents.

Examination of the Escrow Documents is subject to the following conditions:

- a. The Escrow Documents are proprietary and confidential.
- b. Access to the documents will take place only in the presence of authorized representatives from the Department, Contractor, and the applicable subcontractors.
- c. The Contractor shall designate, in writing, the personnel from within the Contractor's organization who are authorized to examine the Escrow Documents. Submit this designation with the Escrow Documents. The Director or the designees may examine the Escrowed Documents.

**8. Final Disposition.** The Department will return the Escrow Documents to the Contractor and subcontractors after completion of the Contract and after all disputes and claims have been settled.

#### **AS PER PLAN DESIGNATION - PROPOSAL NOTE**

For the last several years the "As Per Plan" designation has been added to some item descriptions in the proposal to assist the Contractors to easily identify standard items that have been altered by plan notes.

The "As Per Plan" designation has proven to be a very useful tool for the Contractors. However, its use was never intended to relieve the Contractors of their responsibility to read, bid and construct all items in accordance with all governing plan notes. Therefore, the absence of an "As Per Plan" designation on some item descriptions in the proposal for which there are clear and controlling plan notes does not relieve the Contractors of the responsibility to read, bid and construct those particular items in accordance with the governing plan notes.

Be advised that the item descriptions in the bidding proposal must be read or interpreted with the governing plan notes and the Construction and Material Specification Manual. A claim based upon an "order of precedence" basis will be denied. In the event that a conflict, either real or perceived, exists between the item description and the governing plan note, the Contractors are to request clarification through the pre-bid process.

#### **DRUG-FREE WORKPLACE**

The prime contractor agrees to comply with all applicable state and federal laws regarding drug-free workplace. The prime contractor shall make a good faith effort to ensure that all its employees, while working on an ODOT project, will not purchase, transfer, use or possess illegal drugs or alcohol or abuse prescription drugs in any way.

The prime contractor shall also requires that this contractual obligation be placed in all subcontractor and materialman contracts that it enters into and further requires that all subcontractors and materialmen place the same contractual obligations in each of their lower tier contracts.

#### **UNRESOLVED FINDING FOR RECOVERY**

The Contractor affirmatively represents to the Department that it is not subject to a finding for recovery under Ohio Revised Code §9.24, or that it has taken the appropriate remedial steps required under §9.24 or otherwise qualifies under that section. The Contractor agrees that if this representation is deemed to be false, the contract shall be void ab initio as between the parties to this contract, and any funds paid by the state hereunder shall be immediately repaid to the Department, or an action for recovery may be immediately commenced by the Department for recovery of said funds.

#### **ASSIGNMENT OF ANTITRUST CLAIMS IN STATE CONTRACT LANGUAGE**

It is the policy of the Ohio Department of Transportation that ODOT and the Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are usually borne by ODOT. As consideration for the Award of the Contract and intent to be legally bound, the Contractor acting herein by and through the person signing this contract on behalf of the Contractor as a duly authorized agent, hereby assigns, sells, conveys, and transfers to ODOT any and all right, title and interest to any and all claims and causes of action the Contractor now has or hereafter requires under state or federal antitrust laws provided that the claims or causes of action related to the goods or services that are the subject to the contract. In addition, the Contractor warrants and represents that it will require any and all of its subcontractors and first tier suppliers to assign any and all federal and state antitrust claims and causes of action to ODOT. The provisions of this article shall become effective at the time ODOT executes this contract without further acknowledgment by any of the parties.

All contracting entities shall assign their rights and responsibilities to ODOT for all antitrust claims and causes of action regarding subcontractors.

#### **SPECIFICATION AND SUPPLEMENTAL SPECIFICATIONS, POLICIES AND SPECIAL PROVISIONS INCORPORATED BY REFERENCE AS IF REWRITTEN HEREIN – 2/11/04:**

(1) The State of Ohio Department of Transportation Construction and Material Specifications dated January 1, 2002, will govern this improvement with the following:

Supplemental Specification No. 832	04/17/04
Supplemental Specification No. 833	02/12/03
Supplemental Specification No. 864	07/11/00
Supplemental Specification No. 908	04/18/03

#### Special Provisions:

Policy 27-009(P) and Standard Procedure 510-009 (SP)

Policy 27-010(P) and Standard Procedure 510-010 (SP)

Policy 27-012(P)

Copies of these Special Provisions policies can be found on our website at <http://www.dot.state.oh.us/construction/OCA/Policy/default.htm>.

**ON-THE JOB TRAINING (OJT) PROGRAM PROVISIONS – 5-22-03**

The requirements of this Training Special Provision supersede subparagraph 7b of the Special Provision entitled Special Employment Opportunity Responsibilities, and implements 23 U.S.C. 140(a).

The following must be included as part of the Contractor's equal employment opportunity affirmative action training program:

The Contractor must provide on-the-job training aimed at developing full journey persons in the type or job classification in which they work.

The contractor is not required to have a specific number of trainees assigned to this project. The number of trainees will be distributed among the work classifications on the basis of the Contractor's needs and the availability of the journey persons in the various classifications. The Contractor will be credited for each trainee employed by him or her who is currently enrolled or becomes enrolled in an approved program.

Training and upgrading of minorities and women toward journey person status is a primary objective of this Training Special Provision. Accordingly, the Contractor must make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and will not be used, to discriminate against any applicant for training, regardless of whether the applicant is a member of a minority group or not.

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

The minimum length and type of training for each classification will be established in the training program selected by the Contractor.

No payment by ODOT will be made to the Contractor for providing this training. However, if the Contractor fails to provide adequate training and cannot show good faith efforts on its part to provide adequate training, it will be subject to a formal compliance review to determine the Contractor's efforts in meeting the EEO laws and regulations.

The Contractor must provide the following reports:

1. CR1 Report
  - A. To be completed on each trainee
  - B. To be filled out at the start of training and finish of training or at the end of the year, whichever comes first
  - C. To be submitted to the District in which the Contractor's home office is located.
2. Tracking will be on an annual basis. The Contractor must submit the subsequent CR1 to the District in which the Contractors home office is located.

The prime or subcontractor conducting the training must be involved in at least one Federal project per calendar year in order to get FHWA training credit. Participation in the OJT Program is not project or contract specific.

All Contractors are encouraged to participate in the OJT program. Such a program will be considered when examining the contractor's Good Faith Efforts toward meeting its contractual affirmative action obligations.

All Contractors shall submit their own Training Program or Apprenticeship Certificate, for approval, to the District in which the company's home office is located.

All OJT Trainees must have the appropriate certification. Apprenticeship Certificates can be obtained from the State of Ohio, Bureau of Apprenticeship and Training. The union apprenticeship agreement is not acceptable verification of an apprentice's enrollment in a union sponsored training program. A copy of the Apprenticeship Certificate along with a statement indicating the number of months/years the employee has been in the apprenticeship program must be submitted to the EEO Coordinator in the company's home district and to the prevailing wage coordinator in the district responsible for the project within 90 days of the apprentice beginning work on the project.

#### **DISPUTE RESOLUTION AND ADMINISTRATIVE CLAIM PROCESS (7-19-02)**

This specification is the Department's dispute resolution process based on the partnering approach to project administration and the Department's administrative claim process. The Contractor must follow this process in order to resolve disputes on the project and to seek additional compensation or contract time from the Department in the form of an administrative claim.

The Contractor must exhaust this process prior to filing an action in the Ohio Court of Claims. These procedures do not compromise the Contractors right to seek relief in the Ohio Court of Claims.

All parties in the dispute must follow the specified steps. Personnel involved in second or third tier reviews will not consider a dispute until it has been properly reviewed by the previous tier. The Contractor's personnel shall not contact Department personnel involved in a second or third tier review until the dispute has been thoroughly reviewed by the previous tier.

Disputes will include disagreements, matters in question, and differences of opinion between department personnel and the Contractor. Claims are disputes that are not settled in the dispute resolution process and the Contractor has documented costs or time incurred as a result of such disputes.

Disputes and claims by subcontractors and suppliers may be pursued by the Contractor on behalf of subcontractors or suppliers. Disputes and claims of subcontractors and suppliers against the Contractor will not be reviewed by the Department. Disputes and claims by subcontractors and suppliers against the Department but not supported by the Contractor will not be reviewed by the Department.

Disputes and claims subject to review by the Department include:

1. Interpretation of specifications, standard drawings, plans, the proposal, working drawings, change orders, and orders by Department personnel having authority over the project.
2. Differing site conditions as defined in 104.02.B.

3. Cost and time incurred by:
  - a. Suspension of the work under 104.02.C.
  - b. Significant changes in scope of work under 104.02.D.
  - c. Utility interference with the work under 105.07 and 4A notes.
  - d. Extra work ordered under 104.02.F and the policy on Change Orders.
  - e. Acts or inaction of the Department or other government agencies.
4. Adequacy and constructability of the plan design.
5. Contract time extensions due to weather, shortages of labor, equipment, or materials, or other causes beyond the Contractor's control as defined in 108.06 and the policy on *Postponement of Contract Completion Dates and Waiver of Liquidated Damages*.
6. Other subjects mutually agreed upon by the Department and Contractor to be under the scope of the dispute resolution and claims process.

## **DISPUTE RESOLUTION**

**Early Notice.** The Contractor, or subcontractor through the Contractor, shall give to the project engineer or supervisor (PE/PS), written notice of any circumstance or dispute on the project that may result in a claim. This early notice must be given by the end of the second working day following the occurrence of the circumstances or dispute. The PE/PS and Contractor or subcontractor shall maintain records of labor, equipment, and materials used on the disputed work or made necessary by the circumstance. Such records shall start when early notice is received by the PE/PS or when the project personnel are aware of the circumstance or dispute.

**Continuation of Work.** The Contractor or subcontractor shall continue with all project work, including that which is in dispute. The Department will continue payments for contract work.

**STEP 1 of Dispute Resolution (Project Level).** The PE/PS will meet with the Contractor's superintendent within two (2) working-days of receipt of any early notice. They shall review all pertinent information and contract provisions and negotiate an equitable settlement according to the Contract Documents. If settlement is not achieved, they must escalate the dispute to Step 2.

**STEP 2 of Dispute Resolution (Administrative Level).** If the dispute is escalated to Step 2, the District Construction Engineer or designee (other than the project personnel involved) shall meet with personnel from the Contractor's headquarters, and consider the dispute. This Step 2 meeting shall occur within ten (10) working days of the completion of Step 1. The DCE and Contractor's personnel shall review the information on the dispute presented by the personnel involved in Step 1 and negotiate an equitable settlement according to the Contract Documents. If settlement is not achieved, they must escalate the dispute to Step 3.

**STEP 3 of Dispute Resolution (Deputy Director Level).** A Deputy Directors' Board (DDB) will review disputes that are escalated to Step 3. The DDB will consist of the District Deputy Director of the District involved in the dispute, the Deputy Director of the Division of Construction Management, and the Deputy Director of the Division of Contract Administration.

To prepare for a DDB review, the DCE will assign a dispute number, create a file on the dispute, and assign a person to review and manage the dispute. This manager will advise the Office of Construction Administration on the status of the dispute. The dispute number will consist of the District number, followed by a hyphen and then the project number, followed by a hyphen and the number of disputes on the project this dispute represents.



**Dispute Documentation.** The Contractor shall submit documentation of the dispute to the Office of Construction Administration (4 copies) and DCE within twenty (20) working days of the completion of Step 2. Failure to meet this time frame or to request an extension necessary for the proper preparation of the documentation may terminate further review of the dispute and may act as a waiver of the Contractor's right to file a claim.

The dispute document shall be an original document that clearly and in detail gives the following information for each item of additional compensation and time extension requested:

- a) A narrative of the disputed work or project circumstances at issue with sufficient description and information to enable understanding by a third person who is not familiar with the project. This section must include the dates of the disputed work and the date of early notice.
- b) References to the applicable provisions of the plans, specifications, proposal, or other contract documents. Copies of the cited provisions shall be included in the claim document.
- c) The dollar amount of additional compensation and length of contract time extension being requested.
- d) The cost and schedule analysis and supporting documents that were the basis for the requested compensation and time extensions stated in (c).
- e) Copies of relevant correspondence and other pertinent documents.

The dispute document shall be identified by County, project number, Contractor name, subcontractor, or supplier, if involved in the dispute, and dispute number.

The Office of Construction Administration will schedule a hearing on the dispute within fifteen (15) working days of receiving acceptable dispute documentation or as otherwise agreed to by the DDB and the Contractor. The Contractor's position on the dispute will be presented by executive officers of the Contractor (maximum three). The DCE will present the reasons the dispute was not resolved. The DDB will issue a written decision on the dispute, within fifteen (15) working days of the hearing.

#### **ADMINISTRATIVE CLAIM PROCESS**

**Notice of Claim.** The claim process is started by the Contractor, who must provide written *Notice of Intent to File a Claim* to the Secretary of the Director's Claim Board within thirty (30) calendar days of the completion of Step 3. This notice shall state the Contractor's request for a Director's Claim Board hearing on the claim or for an acceptable alternative dispute resolution technique.

The dispute becomes a claim when the Secretary receives the *Notice of Intent to File a Claim*. The Secretary will assign a number to the claim.

**Claim Certification Requirements.** When submitting any claim, the Contractor must certify the claim, under oath, in writing. Such certification shall attest to the following:

1. The claim is made in good faith.
2. To the best of the Contractor's knowledge, all data offered to support the claim is accurate and complete.
3. The claim amount accurately reflects the Contractor's actual incurred costs.

This claim certification shall also be notarized pursuant to the laws of the State of Ohio.

The following is an example of the correct form for a claim certification:

(The Contractor) certifies that this claim is made in good faith, that all supporting data is accurate and complete to the best of (the Contractor's) knowledge and belief, and that the claim amount accurately reflects the contract adjustment for which (the Contractor) believes the Department is liable.

(The Contractor)

By: \_\_\_\_\_

(Name and Title)

Date of Execution: \_\_\_\_\_

**Interest on Claims.** The Department shall pay interest on any amount found due on a claim, which is not paid within 30 days of the Department's receipt of the certified claim. Such interest shall be paid to the Contractor for the period beginning on the thirty-first (31st) day after the Department's receipt of the certified claim, and ending on the day that the payment of the amount due is made. Interest payments provided for in this provision shall be at the rate per calendar month that equals one-twelfth of the rate per annum prescribed by section 5703.47 of the Ohio Revised Code for the calendar year that includes the month for which the interest charge accrues.

**Claims Under \$100,000.** The Step 3 DDB decision on disputes of less than \$100,000 is administratively final. However, a Contractor may request an Alternative Dispute Resolution (ADR) technique inclusive of binding arbitration as defined by R. C. Section 5525.23, in lieu of filing suit in the Ohio Court of Claims.

**Claims Over \$100,000.** The Step 3 DDB decision on claims of more than \$100,000 may be appealed to the Director's Claim Board (Board) or the Contractor may request an ADR technique inclusive of binding arbitration as defined by R. C. Section 5525.23.

**Board Hearing.** If a Board hearing is requested, the Secretary will schedule a hearing after acceptable documentation of the Contractor's claim and the District's position is received by the Board, exchanged with both parties, and sufficient time for review and requests for more documentation has elapsed. Six (6) copies of all documents are required by the Board. The Contractor's claim document shall be the same format as specified in Dispute Documentation.

The Board may order consolidation of all disputes into one claim in order to have a single hearing of all project issues. The Board may schedule its hearing after the completion of the project or until such time that it is assured that all disputes on the project have been processed through Steps 1, 2 and 3 of the Dispute Resolution Process and these issues are before the Board.

The Contractor and District will be allowed thirty (30) minutes to present their respective positions before the Board. The Board may grant more time for these presentations for complex claims, if requested prior to the hearing.

The Board will hear the entire claim. The Board is not bound by any offers of settlement or findings of entitlement made during Steps 1, 2, and 3 of the Dispute Resolution Process. The Board may, on its own initiative, request information of the Contractor in addition to that submitted for the hearing. If the Contractor fails to reasonably comply with such request, the Board may render its decision without such information.

The Board will consist of three (3) voting members. They are the Assistant Director for Highway Management who will be the chairperson, the Assistant Director for Planning and Production, and a District Construction Engineer from a District not involved with the claim. The Board may have technical and legal advisors at the hearing for assistance in reviewing and deciding the claim.

The Board will issue a written decision within thirty (30) calendar days of the hearing or receiving information requested after the hearing. The decision of the Board is the final step of the Department claim process and may not be appealed any further within the Department.

#### **ALTERNATIVE DISPUTE RESOLUTION (ADR)**

The Contractor may request ADR on claims under \$100,000 that have proceeded through the Deputy Director Level and may request ADR in lieu of a Director's Claim Board hearing on claims of \$100,000 or greater. The Department may agree to arbitration or mediation in the manner in which those methods are practiced by the Department and allowed by law.

The Contractor may request ADR by letter to the Secretary of the Director's Claim Board within thirty (30) calendar days of receipt of a Step 3 DDB decision. The Secretary will coordinate the following: the agreement of the parties to the ADR method; the selection of a neutral third party or technical expert; and the sharing of fees of the neutral third party or technical expert equally. The Secretary will obtain a written agreement, signed by both parties, that establishes the ADR. The neutral third party or technical expert will have complete control of the claim upon execution of the ADR agreement.

#### **SAFETY**

Section 107.01 of the Construction and Materials Specifications requires among other things, compliance with Chapter 4121:1-3 of the Ohio Administrative Code entitled "Specific Safety Requirements of The Industrial Commission of Ohio relating to Construction," effective November 1, 1979, and with the "Federal Occupational Safety and Health Act of 1970 and Code of Federal Regulations, Title 29, Chapter XVII, Part 1926."

#### **US ARMY CORPS OF ENGINEERS AND OHIO ENVIRONMENTAL PROTECTION AGENCY PERMITS**

The above referenced permits are incorporated and made a part of this contract as special provisions incorporated herein. Therefore, in the event that the Contractor or its agents refuse or fail to adhere to the requirements of the 404 Permit, and/or the NPDES Stormwater Permit and as a result an assessment or fine is made or levied against the Ohio Department of Transportation, the Contractor shall reimburse the Department within thirty (30) calendar days of the notice of assessment or fine or the Department may withhold the amount of the fine from the Contractor's next pay estimate. All money collected or withheld from the Contractor shall be delivered to the permitting agencies issuing the assessment or fine.

These fines are not to be construed as a penalty but are liquidated damages to recover costs assessed against the Department due to the Contractor's refusal or failure to comply with the permits.

The Contractor shall make all necessary or required adjustments to the Storm Water Pollution Plan or plan quantities to adhere to the above permits and shall be paid in accordance with the contract. The Engineer will make the weekly and rainfall inspections of the work as required by the NPDES. (Copies available in the Office of Contracts)

## **MAINTENANCE OF EROSION CONTROL ITEMS IN THE CONTRACT**

When the Contractor properly places the erosion control items in the contract in accordance with the contract documents or as directed by the Engineer, then the Department will pay for the cost to maintain these items of work by the unit bid prices or by 109.05.

## **IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

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

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

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

## **UTILITY NOTE**

The contractor must exercise caution when working in proximity to the existing and /or relocated utility facilities.

Sections 105.07 and 107.16 of the Department of Transportation Construction and Material Specifications require that the contractor cooperate with all utilities located within the limits of this construction project and take responsibility for the protection of the utility property and services.

If the contractor is directed by a utility company to perform any work not specifically contained in this note, the Department will not compensate the contractor for this work unless the Department approves the request in writing before the work begins. If the work is not preapproved by the Department, the contractor will be responsible for obtaining reimbursement for its work from the utility company which directed the contractor to perform the work.

In the event that the contractor requests that additional work, not specifically contained in this note, be performed by a utility company, the contractor will be responsible for reimbursing the utility company for the additional work unless the Department has agreed in writing to pay for the additional work before the work begins.

## **CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS**

The required contract provisions for federal-aid construction contracts (contained in Form FHWA 1273 revised April 1993) are hereby incorporated reference as if rewritten herein.

### **FEDERALLY REQUIRED EEO CERTIFICATION**

The bidder hereby certifies that he **has** ....., **has not** ....., participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that he **has** ....., **has not** ....., filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Circle the Appropriate "**has** or **has not**" above.

### **FEDERALLY REQUIRED EEO CERTIFICATION CLAUSE**

The Federally Required EEO Certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontractors which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

### **NOTICE OF REQUIREMENT OF AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows: Goals for minority participation is 7.8 percent for all crafts in the covered area of EA ( 02 ) shown in the attachment to ODOT letter of March 17, 1983. Goals for all other economic areas as discussed in the following paragraph are established per our letter dated March 17, 1983. Goals for female participation in each trade for the "covered area" (Ohio) is 6.9 percent.

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard

to this second area, the Contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

### **REQUIRED REPORTS**

The Contractor shall provide a CR-2 Report to the ODOT District EEO Office in which the Contractor's home office is located. The CR-2 Report will summarize the minorities and females and their hours worked on ODOT projects only. It will be submitted quarterly according to the following schedule:

<b>Quarter</b>	<b>Due Date</b>
January, February, March	April 10
April, May, June	July 10
July, August, September	October 10
October, November, December	January 10

In the event of a formal compliance review, the Contractor will be required to submit reports for the economic areas being reviewed.

Statewide Input 29 Forms must be submitted monthly to the Ohio Department of Administrative Services.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs, 200 N. High Street, Room 409, Columbus, Ohio 43215, within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract, estimated starting and completion dates of the subcontract and the geographical area in which the subcontract is to be performed.

**SPECIAL PROVISIONS OF FEDERAL-AID HIGHWAY PROGRAM OF MANUAL 6-4-1-2  
SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES**

**1. GENERAL**

- a. Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity as required by Executive Order 11246 and Executive Order 11375 are set forth in Required Contract Provisions (Form PR- 1273 or 1316, as appropriate) and these Special Provisions which are imposed pursuant to Section 140 of Title 23, U.S.C., as established by Section 22 of the Federal-Aid Highway Act of 1968. The requirements set forth in these Special Provisions shall constitute the specific affirmative action requirements for project activities under this contract and supplement the equal employment opportunity requirements set forth in the Required Contract Provisions.
- b. The contractor will work with the State Highway Agencies and the Federal Government in carrying out equal employment opportunity obligations and in their review of his/her activities under the contract.
- c. The contractor and all his/her subcontractors holding subcontracts not including material suppliers, of \$10,000 or more, will comply with the following minimum specific requirement activities of equal employment opportunity: (The equal Employment Opportunity requirements of Executive Order 11246, as set forth in Volume 6, Chapter 4, Section 1, Subsection I of the Federal-Aid Highway Program Manual, are applicable to material suppliers as well as contractors and subcontractors.) The contractor will include these requirements in every subcontract of \$10,000 or more with such modification of language as is necessary to make them binding on the subcontractor.

**2. EQUAL EMPLOYMENT OPPORTUNITY POLICY**

The contractor will accept as his operating policy the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program:

It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, or national origin. Such action shall include: employment, upgrading, demotion, or transfer recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship, pre-apprenticeship, and/or on-the-job training.

**3. EQUAL EMPLOYMENT OPPORTUNITY OFFICE**

The contractor will designate and make known to the State Highway Agency contracting officers an equal employment opportunity officer (hereinafter referred to as the EEO Officer) who will have the responsibility for and must be capable to effectively administering and promoting an active contractor program of equal employment opportunity and who must be assigned adequate authority and responsibility to do so.

**4. DISSEMINATION OF POLICY**

- a. All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's equal employment opportunity policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
  - (1) Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's equal employment opportunity policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.
  - (2) All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer or other knowledgeable company official covering all major aspects of the contractor's equal employment opportunity obligations within thirty days following their reporting for duty with the contractor.
  - (3) All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer or appropriate company official in the contractor's procedures for locating and hiring minority group employees.
- b. In order to make the contractor's equal employment opportunity policy known to all employees, prospective employees and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the contractor will the following actions:
  - (1) Notices and posters setting forth the contractor's equal employment opportunity policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
  - (2) The contractor's equal employment opportunity policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**5. RECRUITMENT**

- a. When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Employment Opportunity Employer." All such advertisements will be published in newspapers or other publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
- b. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants, including, but not limited to, State employment agencies, schools, colleges and minority group organizations. To meet this requirement, the contractor will, through his EEO Officer, identify sources of potential minority group employees, and establish with such identified sources



procedures whereby minority group applicants may be referred to the contractor for employment consideration.

In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to extent that the systems permits the contractor's compliance with equal employment opportunity contract provisions. (The U.S. Department of Labor has held that where implementation of such agreements have the effect of discriminating against minorities or women or obligates the contractor to do the same, such implementation violates Executive Order 1 1246, as amended.)

- c. The contractor will encourage his present employees to refer minority group applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring minority group applicants will be discussed with employees.

## **6. PERSONNEL ACTIONS**

Wages, working conditions and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, or national origin. The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

## **7. TRAINING AND PROMOTION**

- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of

apprenticeship or training. In the event the "Training Special Provisions" are included in this bid proposal, this subparagraph will be superseded as indicated in said provisions.

- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

## **8. UNIONS**

If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

- a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
- b. The contractor will use best efforts to incorporate an equal employment opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, or national origin.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the State Highway Department and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex or national origin, making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The U.S. Department of Labor has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the State highway agency.

**9. SUBCONTRACTING**

- a. The contractor will use his best efforts to solicit bids from and to utilize minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of minority-owned construction firms from State Highway Agency personnel.
- b. The contractor will use his best efforts to ensure subcontractor compliance with their equal employment opportunity obligations.

**10. RECORDS AND REPORTS**

- a. The contractor will-keep such records as are necessary to determine compliance with the contractor's equal employment opportunity obligations. The records kept by the contractor will be designed to indicate:
  - (1) the number of minority and non-minority group members and women employed in each work classification on the project,
  - (2) the progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to contractors who rely in whole or in part on unions as a source of their work force),
  - (3) the progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees, and
  - (4) the progress and efforts being made in securing the services of minority group subcontractors or subcontractors with meaningful minority and female representation among their employees.
- b. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State Highway Agency and the Federal Highway Administration.
- c. The contractors will submit to the State Highway Agency a monthly report for the first three months after construction begins and every month of July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form PR 139 1. If on-the-job training is being required by "Training Special Provisions," the contractor will be required to furnish Form FHWA 1409.

**REQUIRED CONTRACT PROVISIONS FEDERAL AID CONSTRUCTION CONTRACTS –  
FHWA 1273**

- I. [General](#)
- II. [Nondiscrimination](#)
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- X. [Implementation of Clean Air Act and Federal Water Pollution Control Act](#)
- XI. [Certification Regarding Debarment, Suspension Ineligibility, and Voluntary Exclusion](#)
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## Attachments

- A. [Employment Preference for Appalachian Contracts \(included in Appalachian contracts only\)](#)

### I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2;  
Section IV, paragraphs 1, 2, 3, 4, and 7;  
Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

- a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
- b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

## II. NONDISCRIMINATION

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

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
- b. The contractor will accept as his operating policy the following statement:

*"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."*

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be

made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. **Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.



b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

- (1) The number of minority and non-minority group members and women employed in each work classification on the project;
- (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
- (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
- (4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

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

### III. NONSEGREGATED FACILITIES

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

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or

vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

#### **IV. PAYMENT OF PREDETERMINED MINIMUM WAGE**

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

##### **1. General:**

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C.

276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

**2. Classification:**

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where

appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

**3. Payment of Fringe Benefits:**

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

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

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work

performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

(1) A helper is a semi-skilled worker (rather than a skilled journeyman mechanic) who works under the direction of and assists a journeyman. Under the journeyman's direction and supervision, the helper performs a variety of duties to assist the journeyman such as

preparing, carrying and furnishing materials, tools, equipment, and supplies and maintaining them in order; cleaning and preparing work areas; lifting, positioning, and holding materials or tools; and other related, semi-skilled tasks as directed by the journeyman. A helper may use tools of the trade at and under the direction and supervision of the journeyman. The particular duties performed by a helper vary according to area practice.

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

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

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

**6. Withholding:**

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

**7. Overtime Requirements:**

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics,

watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

**8. Violation:**

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

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

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

**V. STATEMENTS AND PAYROLLS**

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

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

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

**2. Payrolls and Payroll Records:**



a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

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

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor

of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

## **VII. SUBLETTING OR ASSIGNING THE CONTRACT**

1. The contractor shall perform with its own organization contract work amounting to not less than 50 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as

the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

#### **VIII. SAFETY: ACCIDENT PREVENTION**

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

#### **IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

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

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

18 U.S.C. 1020 reads as follows:

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

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

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

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

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

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

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

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

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

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

### **1. Instructions for Certification - Primary Covered Transactions:(Applicable to all Federal-aid contracts - 49 CFR 29)**

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from

participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of

embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**2. Instructions for Certification - Lower Tier Covered Transactions:** (Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from



participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT PREFERENCE FOR APPALACHIAN CONTRACTS**  
(Applicable to Appalachian contracts only.)

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract,

provided that the number of nonresident persons employed under this subparagraph 1c shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph 4 below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which he estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, he shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within 1 week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph 1c above.

5. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

#### **CERTIFICATION OF NONSEGREGATED FACILITIES**

(a) A Certification of Nonsegregated Facilities, as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities (is included in the proposal and must be submitted prior to the award of a Federal-aid highway construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause).

(b) Bidders are cautioned as follows: By signing this bid, the bidder will be deemed to have signed and agreed to the provisions of the "Certification of Nonsegregated Facilities" in this proposal. This certification provides that the bidder does not maintain or provide for his employees facilities which are segregated on a basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the bidder will not maintain such segregated facilities.

(c) Bidders receiving Federal-aid highway construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, will be

required to provide for the forwarding of the following notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

*"Notice to Prospective Subcontractors and Material Suppliers of Requirement for Certification of Nonsegregated Facilities" -*

(a) A Certification of Nonsegregated Facilities as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, which is included in the proposal, or attached hereto, must be submitted by each subcontractor and material supplier prior to the award of the subcontract or consummation of a material supply agreement if such subcontract or agreement exceeds \$10,000 and is not exempt from the provisions of the Equal Opportunity clause.

(b) Subcontractors and material suppliers are cautioned as follows: By signing the subcontract or entering into a material supply agreement, the subcontractor or material supplier will be deemed to have signed and agreed to the provisions of the "Certification of Nonsegregated Facilities" in the subcontract or material supply agreement. This certification provides that the subcontractor or material supplier does not maintain or provide for his employees facilities which are segregated on the basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the subcontractor or material supplier will not maintain such segregated facilities.

(c) Subcontractors or material suppliers receiving subcontract awards or material supply agreements exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of this notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

#### **AFFIDAVIT OF SUBCONTRACTOR PAYMENT**

The Code of Federal Regulations 49, 26.37(b), requires the Ohio Department of Transportation (ODOT) to monitor and verify that work committed to Disadvantaged Business Enterprise (DBE) firms at contract award is actually performed by the DBE's. Additionally, ODOT is required to report the DBE participation on each project, including all work, materials or service sublets. Therefore, it is ODOT's responsibility to discern whether payments are made to DBE firms. An affidavit is to be completed and signed by the contractor within 15 days of the completion of the project. The affidavit seeks to verify actual payments made to DBE firms on the project. Each DBE firm must verify the actual payment amount.

The blank spaces in the affidavit must be filled in correctly, where indicated. The affidavit must be signed by the prime contractor and subcontractor, or by the subcontractor and DBE subcontractor, if applicable. By signing the affidavit, the noted firm agrees that the payment amount recorded is true and accurate as of the payment time period.

Completed and signed affidavit shall be mailed to the Ohio Department of Transportation, Office of Contracts, DBE Services section, 1980 West Broad Street, Columbus, Ohio 43223.

## **SUBCONTRACT AGREEMENTS**

Prime contractors will not be required to submit executed C-92s with their subcontract agreements for Disadvantaged Business Enterprises (DBE) subcontractors prior to the execution of the prime contract with ODOT. The prime contractor must only furnish to the Department subcontract agreements from the DBE subcontractors with whom they propose to utilize to fulfill the project goal. Again, this requirement is at the time of contract execution with ODOT.

However, the prime contractor must submit C92s prior to the DBE commencing work. At the time of submission of the C-92 the DBE subcontractor must have sufficient dollar and work type qualifications to perform the work. The prime contractor will be held accountable to meet the project goal.

## **DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS**

It is the policy of the Ohio Department of Transportation that Disadvantaged Business Enterprises (DBEs) shall have equal opportunity to compete for and perform subcontracts which the Contractor enters into pursuant to this contract. The Contractor must use its best efforts to solicit bids from and to utilize DBE subcontractors with meaningful minority groups and female representation among their employees. Consequently, the requirements of Title 49 CFR Part 26 and Ohio Revised Code §5525.011 apply to this contract. The Contractor must ensure that the DBE subcontractor(s) is performing a "commercially useful function" as defined in CFR 26.55.

At least 10 percent of this contract as bid shall be subcontracted to DBE firms who have been certified as a DBE by the Ohio Department of Transportation.

In order to be assured that the Contractor complies with this contract requirement the Contractor shall provide certified payrolls from its DBE subcontractors where appropriate. When the Contractor utilizes a service, for example trucking, to satisfy a part or its entire contractual goal, the Contractor, when requested, must provide a copy of each canceled check issued to the DBE service provider until the goal amount is reached. The Department shall total the amounts of the canceled checks and compare that total to the subcontract agreement by the parties and the C-92 issued to the Contractor for the work to be performed by the DBE subcontractor.

## **WAIVER PROCESS FOR DBE GOAL**

The Contractor must document the progress and efforts being made in securing the services of DBE subcontractors. In the event the Contractor is unable to meet the DBE Goal placed on this project, a request for a waiver of all or part of the goal may be made to the Office of Contracts. The written request must indicate a good faith effort was made to meet the goal and be sent to the Administrator, Office of Contracts, 1980 West Broad Street, Columbus, Ohio, 43223. There will be no extension of time for the project granted if the Contractor wishes to avail himself of this process. If an item of work subcontracted to a DBE firm is non-performed by the Department or the subject of an approved VECP, the Contractor may request a waiver for the portion of work excluded.

The Contractor must provide the following information and documentation when requesting DBE goal waiver:

1. Dollar value and % of DBE goal. Dollar value and % of waiver request.
2. Signed copy of each subcontract or purchase order agreement between the prime and DBE subcontractor utilized in meeting the contract goal.

3. Copy of dated written communication, fax confirmation, personal contact, follow up and negotiation with the DBE's.
4. Copy of dated written communication and/or fax confirmation that bidder solicited and provided DBE's with adequate information about the plans, specifications and requirements of the contract in a timely manner to assist them in responding to a solicitation.
5. Copy of dated written communication and/ or fax confirmation of each noncompetitive DBE quote that includes the dollar value of each reference item and work type.
6. Copy of dated written communication and/ or dated fax confirmation of DBE's that were not interested in providing a quote for the project.
7. Documentation of all negotiating efforts and reason for rejecting bids.
8. Documentation of good faith efforts (GFE) to meet the DBE subcontract goal, by looking beyond the items typically subcontract or consideration of subcontracting items normally performed by the prime as a way to meet the DBE goal.

The Administrator will review the submitted documentation and issue a written decision within ten (10) business days. The Contractor may request administrative reconsideration within 14 days of being informed that it did not perform a GFE. The Contractor must make this request in writing to the following official:

Ohio Department of Transportation  
Attention: Mark Kelsey, Deputy Director, Division of Contract Administration  
1980 West Broad Street  
Columbus, Ohio 43223

The reconsideration official will not have played any role in the original determination that the contractor did not document sufficient good faith effort.

As part of this reconsideration, the contractor will have the opportunity to provide written documentation or an argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so. ODOT will send the contractor a written decision on reconsideration explaining the basis for finding that the contractor did or did not meet the goal or make adequate good faith efforts. The result of the reconsideration process is not administratively appealable to the US Department of Transportation. However, it is appealable to the Franklin County Court of Common Pleas.

### **SANCTIONS**

The Ohio Department of Transportation will issue sanctions if the Contractor chooses not to request a waiver, the Contractor fails to comply with the contract requirements and/or fails to demonstrate the necessary good faith effort.

The Ohio Department of Transportation may impose any of the following sanctions:

- (1) letter of reprimand;
- (2) liquidated damages computed up to the amount of goal dollars not met;
- (3) cross-withhold from future projects;
- (4) contract termination and/or

- (5) other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions include, but are not limited to:

- (1) the magnitude and the type of offense;
- (2) the degree of the Contractor's culpability;
- (3) any steps taken to rectify the situation;
- (4) the Contractor's record of performance on other projects including, but not limited to:
  - a. annual DBE participation over DBE goals;
  - b. annual DBE participation on projects without goals;
  - c. number of complaints the Ohio Department of Transportation has received from DBEs regarding the Contractor; and
  - d. the number of times the Contractor has been previously sanctioned by the Department of Transportation; and
- (5) whether the Contractor falsified, misrepresented, or withheld information.

### **OHIO WORKERS' COMPENSATION COVERAGE**

The Contractor must secure and maintain valid Ohio workers' compensation coverage until the project has been finally accepted by the Department as set forth in Section 109.12(E) of the Construction and Material Specifications Manual. A certificate of coverage evidencing valid workers' compensation coverage must be submitted to the Department before the contract will be executed by the Director.

The Contractor must immediately notify the Department in writing if it or any subcontractor fails or refuses to renew their workers' compensation coverage. Furthermore, the Contractor must notify the Department in writing if its or any of its subcontractor's workers' compensation policies are canceled, terminated or lapse.

The failure to maintain valid workers' compensation coverage shall be considered a breach of contract which may result in the Contractor or subcontractor being removed from the project, withholding of pay estimates and/or termination of the contract.

### **Drug-Free Workplace (DFWP) Discount Program**

The Department will declare a bid non-responsive and ineligible for award if the Contractor is not enrolled and in good standing in the Ohio Bureau of Workers' Compensation's Drug-Free Workplace (DFWP) Discount Program or a similar program approved by the Bureau of Workers' Compensation **within 8 days of the bid opening**. Furthermore, the Department will deny all requests to sublet when the subcontractor does not comply with the provisions of this proposal note.

The Contractor shall insert in each of its subcontracts a clause requiring all subcontractors to comply with all of the provisions of this proposal note. The Contractor is responsible for ensuring compliance by all subcontractors with all of the provisions of this proposal note.

**STEEL PRICE ADJUSTMENT – 8/2/2004**

**A. General:** This proposal note acknowledges fluctuations in the cost of manufactured steel used in the materials defined below and placed as part of the applicable construction work in the form of a pay adjustment. This proposal note will be used in bidding documents only for as long as the price of the steel products set out below are subject to volatile spikes as determined solely by the Department. It is not the intention of the Department to make this proposal note permanent.

These price adjustment provisions apply to items in the contract including any modified standard or non-standard item where the work to be performed involves the placement or installation of one or more of the steel products specified herein.

The Department will publish a monthly adjustment index for steel using data obtained from the United States Department of Labor (USDOL), Bureau of Labor Statistics (BLS) Producer Price Index (PPI), using the average of Metals and Metal Products (WPU10), Iron and Steel (WPU101), and Steel Mill Products (WPU1017). This monthly index is listed as preliminary for four (4) months after initial publication. The Engineer will use the preliminary index data to compute progressive monthly adjustments with final adjustments occurring when the BLS data is finalized or at project closeout using the preliminary data, whichever occurs earlier. The Department will publish a monthly cost basis (CB) for steel using data obtained on the last Wednesday of the month from the American Metal Market (AMM). The cost basis shall determine the raw steel material price for Steel Plate, Cut-to-length as reported for National Mills; Steel – Rod, high carbon (1050) industrial quality as reported for the United States; and Steel – Bar, Merchant Products, Reinforcing Bar, as reported for the United States by the American Metal Market.

**B. Price Adjustment Criteria and Conditions:** Adjustments will be made to the contract for fluctuations in the cost of steel used in the manufacture of the primary components of only the steel products listed in Table B-1:

<b>Product Relationship Table B-1</b>		
<b>Steel Product (Title)</b>	<b>AMM Product Designation (CB)</b>	<b>USDOL-BLS PPI (MI, BI)</b>
Steel Piling and stay in-place steel casing Structural Steel Structural Steel Expansion/ Contraction Joints Steel Bearing Devices Guardrail Steel Traffic Strain Poles, Supports, and Mast Arms Steel Light Towers, Poles, and Mast Arms Sign Ground Mounted Beam Supports, Rigid Overhead Supports, and Span Wire Supports Steel Railing Corrugated Steel Pipe	Steel Plate, Cut-to-length (National Mills)	Average of,  Metals and Metal Products (WPU10),  Iron and Steel (WPU101),  and Steel Mill Products (WPU1017)
Prestress and Post tensioning strand	Steel – Rod, high carbon (1050) industrial quality (United States)	
Reinforcing Steel	Steel – Bar, Merchant Products, Reinforcing Bar (United States)	



Nuts, bolts, rebar chairs, connecting bands and other miscellaneous hardware items shall not be included in the price adjustment. No other steel products shall be considered for a price adjustment.

Adjustments will only be made for fluctuations in the cost of the steel used in the above products as shipped from the producing mill. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

Adjustments may be positive, negative, or non-existent depending on the circumstances. Adjustments for the steel price will be calculated by the Engineer and processed by change order on the Contractor's progress estimate.

No steel price adjustments will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

Furnish the following documentation for all Table B-1 steel products to be incorporated into the work. Submit all documentation to the Engineer prior to incorporation of the steel into the work. The Department will withhold progress payments if the documentation is not provided and at the discretion of the Engineer the work is allowed to proceed. Progress payments will be made upon receipt of the delinquent documentation. Submit separate documentation packages for each steel product in Table B-1 and for each quantity represented by items 2) c and d below. Label each documentation package with a unique number.

- 1) An affidavit signed by the Contractor stating that the documentation provided is true and accurate.
- 2) Identification of the steel product subject to adjustment.
  - a. Documentation package number: PN525 – (Insert the steel product “title” from Table B-1) – (Insert sequential package number beginning with “1”). Example: PN525 – Guardrail – 1, PN 525 – Reinforcing Steel – 2, etc...
  - b. The steel product quantity in pounds (kg).
  - c. Steel Certification and Mill Test Reports for the steel product.
  - d. The date the steel product, subject to adjustment, was shipped from the producing mill.

Upon the incorporation of the steel product into the work provide the Engineer the following:

- 1) An affidavit signed by the Contractor stating that the documentation provided is true and accurate.
- 2) Identification of the steel product subject to adjustment.
  - a. Documentation package number that was initially established for the steel product for which the price adjustment will be calculated.
  - b. The actual steel product quantity in pounds (kg) that was incorporated into the work.

### **Price Adjustment Calculations**

The below formulas allow for a variation in steel prices without recognizing cost increases/decreases within the range of 95% to 105% of the Bidding Index (BI). The total steel price adjustment (SPA) will not be computed unless the percent **% Change** is 5% or more, increase or decrease:

$$\% \text{ Change} = [(MI/BI) - 1] \times 100$$

**For a Price Increase:**

$$\text{SPA} = [(MI/BI) - 1.05] \times \text{CB} \times \text{Q}$$

**Example:** If the average PPI for the month in which the project is let is 110 and the average PPI for the month in which the steel is shipped from the mill is 165 and the Cost Basis (CB) on the last Wednesday of the month preceding the letting date is \$0.32 per pound for a quantity of 50,000 pounds, then the price adjustment increase would be calculated as follows.

$$\text{SPA} = [(165/110) - 1.05] \times 0.32 \times 50,000 = \$7,200.00 \text{ (Increase)}$$

**For a Price Decrease:**

$$\text{SPA} = [(MI/BI) - 0.95] \times \text{CB} \times \text{Q}$$

**Example:** If the average PPI for the month in which the project is let is 165 and the average PPI for the month in which the steel is shipped from the mill is 120 and the CB on the last Wednesday of the month preceding the letting date is \$0.32 per pound for a quantity of 50,000 pounds, then the price adjustment decrease would be calculated as follows.

$$\text{SPA} = [(120/165) - 0.95] \times 0.32 \times 50,000 = -\$3,563.64 \text{ (Decrease)}$$

Where:

SPA = Steel Price Adjustment

MI = Mill Shipping Index. The average of the Producer Price Indices for Metals and Metal Products (WPU10), Iron and Steel (WPU101), and Steel Mill Products (WPU1017) as reported by the United States Department of Labor, Bureau of Labor Statistics for the month the steel was shipped from the producing mill.

BI = Bidding Index. The average of the Producer Price Indices for Metals and Metal Products (WPU10), Iron and Steel (WPU101), and Steel Mill Products (WPU1017) as reported by the United States Department of Labor, Bureau of Labor Statistics for the month preceding the month in which the project is bid.

CB = Cost Basis. The Consumer Buying Price Index value for either Steel – Bar, Merchant Products, Reinforcing Bar (United States); or Steel – Rod, high carbon (1050) industrial quality (United States); or Steel Plate, Cut-to-length (National Mills) as published by the American Metal Market (AMM) on the last Wednesday of the month preceding the month in which the project is bid. The CB (Cost Basis) shall be established for the product relationships listed in Table B-1 and shall establish the raw material base price. The price shall be adjusted to dollars per pound (kg).

Q = Quantity of the steel product, pounds (kg) actually incorporated into the work as documented by the Contractor and verified by the Engineer

**C. Price Adjustment Limitations:** The price adjustments are limited to a % Change of 50%, increase or decrease.

**Example 1:** If the average PPI for the month in which the project is let is 110 and the average PPI for the month in which the steel is shipped from the mill is 171 and the CB on the last Wednesday of the month preceding the letting date is \$0.32 per pound for a quantity of 50,000 pounds, then the price adjustment increase would be calculated as follows.

$$\% \text{ Change} = [(171/110) - 1] \times 100 = 55.45\%$$

The limit is 50% thus the SPA is calculated as follows:

$$\text{SPA} = [(1.50) - 1.05] \times 0.32 \times 50,000 = \$7,200.00 \text{ (Increase)}$$

**Example 2:** If the average PPI for the month in which the project is let is 165 and the average PPI for the month in which the steel is shipped from the mill is 70 and the CB on the last Wednesday of the month preceding the letting date is \$0.32 per pound for a quantity of 50,000 pounds, then the price adjustment decrease would be calculated as follows.

$$\% \text{ Change} = [(70/165)-1] \times 100 = -57.58\%$$

The limit is -50% thus the SPA is calculated as follows:

$$\text{SPA} = [(0.50) - 0.95] \times 0.32 \times 50,000 = - \$7,200.00 \text{ (Decrease)}$$

**D. Payment/Deductions:** The price adjustment will be paid, or deducted from the Contractor's progress estimate, upon approval of a change order. The Engineer will use the preliminary BI and MI index data to compute progressive monthly adjustments with final adjustments occurring when the BLS data is finalized, (four months after initial publication) or at project closeout using the preliminary data, whichever occurs earlier

If the price adjustment is based on estimated material quantities for that time, and a revision to the total material quantity is made in a subsequent or final estimate, an appropriate adjustment will be made to the price adjustment previously calculated. The adjustment will be based on the same indices used to calculate the price adjustment which is being revised. If the shipping date(s) of the revised material quantity cannot be determined, the adjustment for the quantity in question, will be based on the indices utilized to calculate the steel price adjustment for the last initial documentation package submission, for the steel product subject to adjustment, that was incorporated into the particular item of work, for which quantities are being finalized.

**Example:** Reinforcing steel for a particular bridge deck was provided for in three different shipments with each having a different mill shipping date. The quantity of reinforcing steel actually incorporated into the deck was calculated and a steel price adjustment was made in a progress payment. At the conclusion of the work an error was found in the calculation of the final quantity of reinforcing steel incorporated into the deck. The quantity to be adjusted can not be directly related to any one of the three mill shipping dates. The steel price adjustment for the quantity in question would be calculated using the indices that were utilized to calculate the steel price adjustment for the quantity of reinforcing steel represented by the last initial reinforcing steel documentation package submission. The package used would be the one with the greatest sequential number.

**E. Expiration of Contract Time:** When steel products are shipped from the mill after expiration of contract time and liquidated damages are chargeable, steel price adjustments will be based on the MI for the month in which contract time expired.

**F. Documentation Review:** The Department reserves the right to inspect the records of the Contractor, its subcontractors, material fabricators and suppliers to verify the accuracy of the documentation submitted to the Department.

**G. Extra Work/Force Account:** When steel products, as specified herein, are added to the contract as Extra Work, in accordance with the provisions of C&MS Section 109, no steel price adjustments will be made for any products manufactured from steel having a mill shipping date 5 business days after the Department's request. Price adjustments will be made as provided herein however the BI shall be based on the month preceding the 5<sup>th</sup> business day after the Department's request. Moreover the CB shall be based on the applicable AMM Consumer Buying Price Index as published on the last Wednesday of the month preceding the 5<sup>th</sup> business day after the Department's request. For extra work performed on force account basis, reimbursement of actual material costs, along with the specified overhead and profit markup, will be considered to include full compensation for the current cost of steel and no steel price adjustments will be made.

**BOILER-PLATE PROPOSAL NOTE TO BE USED ON ALL PROJECTS USING THE 2002 CONSTRUCTION & MATERIAL SPECIFICATIONS (10-15-2004)**

**108.07 Failure to Complete on Time; Revisions to Schedule of Liquidated Damages. [5-16-03]**

On this project the Liquidated Damages in 108.07 (Failure to Complete on Time) of the Construction and Material Specifications are modified by the following table:

<b>SCHEDULE OF LIQUIDATED DAMAGES</b>			
Original Contract Amount (Total Amount of the Bid)			Amount of Liquidated Damages to be Deducted for Each Calendar Day of Overrun in Time
From Than	More To	Including and	
\$0.00	\$500,000.00		\$700.00
\$500,000.00	\$2,000,000.00		\$750.00
\$2,000,000.00	\$10,000,000.00		\$1,250.00
Over \$10,000,000			\$2,000.00

**CELLULAR TELEPHONES (12-14-00)**

The Contractor shall **NOT** provide cellular telephones to ODOT personnel for either business or personal use. This prohibition includes the use of cellular telephones that the Contractor or its subcontractors may own or lease either currently as an overhead item or have obtained as a result of being awarded this project. ODOT personnel shall utilize only state owned, public or cellular private communication devices in order to conduct state business.

**FLOODPLAIN CLEARANCE FOR WASTE LOCATIONS**

The following is in addition to 105.16.

Ensure that any proposed waste location is not within the FEMA mapped 100-year floodplain. If the proposed waste location is within the FEMA mapped 100-year floodplain, submit written approval from the local floodplain coordinator for the site. The floodplain coordinator contacts for each county are available through the Ohio Department of Natural Resources, Division of Water, (614) 265-6750.

For waste sites shown on the plan, the plan will indicate if the clearances have or have not been obtained for the project right-of-way locations. No extension of time or additional compensation will be paid for any delays due to not having the written permit(s) to waste in a floodplain.

**ITEM 451**

451.09 Finishing Follow all requirements of 451.09 except use transversely textured grooves only .05" and .08" (1.3 to 2.0 mm) in depth. Demonstrate methods to the Engineer for controlling and checking the depth of the groove meets the required depth.

**OPTIONAL USE OF BLENDED CEMENT OR POZZOLANIC MATERIAL OTHER THAN 701 FOR USE IN 499 CONCRETE MIXES.**

The following alternate cementitious materials may be used in ODOT 499 concrete mixes as listed below. Proportion the alternate cementitious material as shown below and only use in the 499 mixes that are listed. Follow the sampling and acceptance requirements defined below. Follow all other specification requirements for the bid concrete item.

Approved List

1. Blended Cement for use in HP3 and HP4 mixes

Lafarge Type SF

This approved blended cement, nominally composed of 92% type 1 cement and 8% micro silica, may be used in 499.03 table 499.093-4 HP3 and HP4. The blended cement will replace the micro silica and type 1 cement content in HP3 and HP4 as shown below:

**English  
Class HP3 (Fly Ash + Microsilica)**

Aggregate	Fine Aggregate	#8 Coarse Aggregate	Blended Cement Content	Fly Ash	Micro-Silica	Water to Cementitious
Type	(lb)	(lb)	(lb)	(lb)	(lb)	Ratio Max
Gravel	1355	1475	510	150	0	0.40
Limestone	1355	1490	510	150	0	0.40
Slag	1355	1295	510	150	0	0.40

**Class HP4 (GGBF Slag + Microsilica)**

Aggregate	Fine Aggregate	#8 Coarse Aggregate	Blended Cement Content	GGBF Slag	Micro-Silica	Water to Cementitious
Type	(lb)	(lb)	(lb)	(lb)	(lb)	Ratio Max
Gravel	1370	1475	470	190	0	0.40
Limestone	1370	1490	470	190	0	0.40
Slag	1370	1295	470	190	0	0.40

**Metric**  
**Class HP3 (Fly Ash + Microsilica)**

Aggregate	Fine Aggregate	#8 Coarse Aggregate	Blended Cement Content	Fly Ash	Micro-Silica	Water to Cementitious
Type	(kg)	(kg)	(kg)	(kg)	(kg)	Ratio Max
Gravel	804	875	303	89	0	0.40
Limestone	804	884	303	89	0	0.40
Slag	804	768	303	89	0	0.40

**Class HP4 (GGBF Slag + Microsilica)**

Aggregate	Fine Aggregate	#8 Coarse Aggregate	Blended Cement Content	GGBF Slag	Micro-Silica	Water to Cementitious
Type	(kg)	(kg)	(kg)	(kg)	(kg)	Ratio Max
Gravel	813	875	279	113	0	0.40
Limestone	813	884	279	113	0	0.40
Slag	813	768	279	113	0	0.40

Do not use these mix proportioning tables if not choosing the blended cement option. Inform the Engineer at the pre-construction conference whether the blended cement option is to be used.

LaFarge Type SF Blended Cement Specific Gravity = 3.06

Sampling requirements for LaFarge Type SF

Provide a 1 gallon sample of the cement in a sealed metal container to the Office of Materials Management, Cement and Concrete Section, 1600 W. Broad Street, Columbus, Ohio 43223.

Acceptance for LaFarge Type SF

Provide the Engineer with a copy of the LaFarge's delivery ticket showing the concrete producer has received the Type SF cement.

**ITEM 509 REPAIRING EPOXY COATED REINFORCING STEEL**

Replace the last sentence in the first paragraph of section 509.09 with the following:

Repair physical damage to the epoxy coating as follows:

Repair with a patching material all damaged coating areas greater than 1/4-inch (6 mm) square or 1/4-inch (6 mm) diameter; approximately 1/8-inch (3 mm) square or 1/8-inch (3 mm) diameter if the opening is within 1/4-inch (6 mm) of an equal or larger opening; or, a length of 6 inches (150 mm) regardless of area. Coating damage in cases where the damaged area is less than specified above, need not be repaired. Use patching material of the same composition and quality as the original coating. Prepare the surface to a near white metal.

### **515.15 CONCRETE**

In addition to 515.15 requirements, provide a concrete mix design which will achieve 2000 coulombs or less @ 90 days when tested per AASHTO T277. Use samples for the test that were mixed without corrosion inhibitors and that were cured with the same methods that will be used to produce the prestressed concrete bridge members. Do not apply additional cure to samples that have reached the required design strength. Submit the test results when submitting the concrete mix design to the Office of Materials Management.

### **ITEM 524 DRILLED SHAFTS**

In addition to the material requirements in 524.02, furnish epoxy coated steel reinforcement as specified in 509.

### **ITEM 526 APPROACH SLABS**

When the approach slab is to be used as a wearing surface, finish and test the surface according to 451.12 prior to grooving.

### **GALVANIZED REINFORCING STEEL OPTION FOR BRIDGE STRUCTURE SPIRALS**

When providing reinforcing steel for spiral cages, galvanized steel conforming to ASTM A767, Class 1, may be provided only for the spiral reinforcing steel in lieu of epoxy coated reinforcing steel. The galvanized coated reinforcing steel will meet all other requirements of 509. Where a sample splice is needed use the lap length requirements for epoxy coated. The Galvanized coating will be applied after the reinforcing has been fabricated. If the galvanized surface becomes damaged during handling in the field, repairs will conform to ASTM A780.

Use bar supports and tie wires which are plastic coated or epoxy coated.

Only suppliers certified under S1068 may provide this reinforcing.

### **SHOP DRAWING APPROVAL FOR STRUCTURES CARRYING RAILROAD TRAFFIC**

In addition to the requirements of Item 501.04A, submit four copies of the prepared shop drawings at least 40 days prior to the pre-fabrication meeting to each railroad company involved for review and approval. Resolve all railroad comments prior to supplying the letter of written acceptance to the Department. The acceptance submission to the Department shall include one set of shop drawings approved by each railroad company involved; copies of all documentation between the railroad(s) and the Contractor; and four sets of Contractor accepted shop drawings for each railroad company involved.

### **TREATING CONCRETE BRIDGE DECKS WITH HMWM RESIN [8-14-02]**

On this project, when treating concrete bridge decks with HMWM Resin, as specified in section 511.22, the following requirements apply:

- A. Replace the reference to SS 954 with 705.15.
- B. Broadcast sand over the entire treated area of the bridge deck by mechanical means to effect a uniform coverage of 0.80 to 1.2 lb/yd<sup>2</sup> (0.43 kg/m<sup>2</sup> to 0.65 kg/m<sup>2</sup>). The sand shall conform to the following grading limits:

Sieve Size%	Passing Max.
No. 4 (4.75mm)	100
No. 8 (2.36mm)	90-100
No. 20 (850um)	5-15
No. 50 (300um)	0-5

The use of commercially available blast sands applied by a common lawn broadcast type seeder/spreader is acceptable. Place sand 10 to 15 minutes after spreading the resin and before any jelling of the resin occurs.

#### **ITEM 740 PAVEMENT MARKING MATERIAL**

Contractors are allowed to use only pavement marking materials listed on the Departmental Prequalified list.

#### **ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN**

In lieu of the requirement in 614.03 requiring the use of portable changeable message signs prequalified according to Supplement 1061 (i.e., evaluated by NTPEP), the use of portable changeable message signs prequalified via ODOT evaluation is also acceptable until December 31, 2006. (Essentially, two prequalified lists, ODOT-based and NTPEP-based, will exist until that date.) After December 31, 2006 only those portable changeable message signs prequalified according to Supplement 1061 will be allowed for use on ODOT contract projects.

#### **ITEM 614 MAINTAINING TRAFFIC: CONFORMANCE OF WORK ZONE DEVICES TO NCHRP 350 (4-18-03)**

Erect signs used on item 614 Maintaining Traffic on supports conforming to standard drawings MT-105.10, MT-105.11 at spacings conforming to TC-52.10, TC-52.20, and details conforming to TC-41.20.

The following devices must meet NCHRP 350 and acceptable written manufacturer certification submitted to the Engineer before the devices are installed on the project. Only ballasting specified by the manufacturer is allowed.

- Drums, with or without lights.
- Cones, with or without lights.
- Vertical panels, with or without lights, and the panel support.
- Portable sign supports.
- Workzone impact attenuators.
- Portable concrete barrier.
- Barricades.

This certification submission requirement is waived if the device is specified in the plans or other bid documents by manufacturer and product number, or if the device appears on the FHWA web page, [http://safety.fhwa.dot.gov/fourthlevel/pro\\_res\\_road\\_nchrp350.htm](http://safety.fhwa.dot.gov/fourthlevel/pro_res_road_nchrp350.htm), listing Roadway Hardware meeting NCHRP 350.

Portable concrete barrier, 32-inches high, and manufactured according to standard construction drawing RM-4.2 or J-J Hook Barrier as identified in RM-4.2 is NCHRP 350 approved. Use of RM-4.2 barrier is allowed without certification if the project verifies that the sections are marked according to RM-4.2.

Contractors are allowed to use the following devices in their inventory, that are not certified to meet NCHRP 350, for their useful life or until January 1, 2005, if they were purchased before October 1, 2000. Contractor certification of purchase or fabrication dates will be acceptable in lieu purchase invoices.



- Portable sign supports.
- Barricades (including barricades made by the Contractor before October 1, 2000).
- Vertical panels with lights and supports.
- Drums with lights.

Contractors are allowed to use GREAT CZ impact attenuators, manufactured by Energy Absorption Systems Inc., in their inventory for their useful life until January 1, 2007, if they were purchased before October 1, 1998.

Contractors are allowed to use portable concrete barrier in their inventory for its useful life or until January 1, 2008, provided it was manufactured according to construction standard drawings MC-9.1 or MC-9.2 (or subsequently RM-4.1 or RM-4.2) and purchased before October 1, 2002.

### **CHAIN LINK FENCE POSTS**

Reference is made to Roadway Engineering Services Standard Drawings Chain Link Fence F-1.1, Dated 7-28-00, and Walk Gates F-3.2, Dated 7-28-00. A 8' 8" line post length may be substituted in lieu of the line post length shown on these two standard drawings. This shall be accomplished by reducing the 4'-0" depth as necessary to accommodate the shorter posts, all other dimensions shown in the standard drawings shall remain unchanged.

### **SUPPLEMENT 1019 (11-01-01) REQUIRED FOR CORRUGATED METAL PIPE COMPONENTS.**

Corrugated Metal Pipe and its components sold under item 603 will be furnished by producers who are certified under supplement 1019, CERTIFICATION PROCEDURE FOR CORRUGATED METAL PIPE Supplement 1019 is required for the following construction and material specifications:

- 707.01 Metallic Coated Corrugated Steel Conduits and Underdrains
- 707.02 Metallic Coated Corrugated Steel Conduits
- 707.03 Structural Plate Corrugated Steel Structures
- 707.04 Pre-coated, Galvanized Steel Culverts
- 707.05 Bituminous Coated Corrugated Steel Pipe and Pipe Arches with Paved Invert
- 707.07 Bituminous Coated Corrugated Steel Pipe and Pipe Arches with Paved Invert
- 707.11 Mortar Lined Corrugated Steel Pipe
- 707.12 Corrugated Steel Spiral Rib Conduits
- 707.13 Bituminous Lined Corrugated Steel Pipe
- 707.14 Bituminous Lined Corrugated Steel Pipe
- 707.15 Corrugated Steel Box Culverts
- 707.21 Corrugated Aluminum Alloy Conduits and Underdrains
- 707.22 Corrugated Aluminum Alloy Conduits
- 707.23 Aluminum Alloy Structural Plate Conduits
- 707.24 Corrugated Aluminum Spiral Rib Conduits
- 707.25 Corrugated Aluminum Box Culverts

### **SUPPLEMENT 1022 (7-19-02) REQUIRED FOR AGRICULTURAL SEED.**

The Department will accept agricultural seed in 659.07, 659.08 and 659.09 under Supplement 1022.

**SUPPLEMENT 1068 (11-01-2001) REQUIRED FOR REINFORCING STEEL AND MECHANICAL SPLICES, WELDED WIRE MESH, AND DOWEL BARS.**

Reinforcing steel and mechanical splices, weld wire mesh, and dowel bars supplied for use under this contract will be furnished by producers who are certified under supplement 1068, REINFORCING STEEL AND WELDED WIRE MESH CERTIFICATION PROGRAM. Supplement 1068 is required for the following construction and materials specifications:

- 509.08 Mechanical Reinforcing Steel Connectors
- 709.00 Epoxy Coated Reinforcing Steel
- 709.01 Deformed and Plain Billet Steel Bars for Concrete Reinforcement
- 709.03 Rail Steel Deformed and Plan Bars for Concrete Reinforcement
- 709.05 Axle Steel Deformed and Plain Bars for Concrete Reinforcement
- 709.08 Cold-Drawn Steel Wire for Concrete Reinforcement
- 709.09 Fabricated Steel Bar or Rod Mats for Concrete Reinforcement
- 709.10 Welded Steel wire Fabric for Concrete Reinforcement
- 709.11 Deformed Steel wire for Concrete Reinforcement
- 709.12 Welded Deformed Steel Wire Fabric for Concrete Reinforcement
- 709.13 Coated Dowel Bars
- 709.14 Epoxy coated Steel wire and Welded Wire Fabric for Reinforcement

**SUPPLEMENT 1067 (11-01-01) REQUIRED FOR FENCE COMPONENTS.**

Fence components sold under item 607 will be furnished by producers who are certified under supplement 1067, 607 FENCE CERTIFICATION PROGRAM. Supplement 1067 is required for the following construction and material specifications:

- 710.01 Barbed Wire
- 710.02 Woven Steel Wire Fence Type 47
- 710.03 Chain-Link Fence
- 710.11 Fence Posts and Braces
- 710.14 Pressure Treated Guardrail and Fence Posts, Braces and Blocks

**SUPPLEMENT 1042 (11-01-01) REQUIRED FOR GUARDRAIL COMPONENTS.**

Guardrail components sold under item 606 will be furnished by producers who are certified under supplement 1042, 606 FENCE CERTIFICATION PROGRAM. Supplement 1042 is required for the following construction and material specifications:

- 710.06 Deep Beam Rail
- 710.12 Square, Sawed, and round Guardrail Posts
- 710.14 Pressure Treated Guardrail and Fence Posts, Braces and Blocks
- 710.15 Steel Guardrail Posts
- 710.16 Guard Posts

**SUPPLEMENT 1072 (11-01-01) REQUIRED FOR PRESSURE TREATED WOOD PRODUCTS.**

Pressure Treated Wood Products supplied for use under this contract will be furnished by producers who are certified under supplement 1072, CERTIFICATION PROCEDURE FOR PRESSURE TREATED LUMBER. Supplement 1072 is required for the following construction and materials specifications:

- 710.12 Square, Sawed, and Round Guardrail Posts
- 710.14 Pressure Treated Guardrail and Fence Posts, Braces and Blocks
- 711.26 Structural Timber, Lumber and Piling

713.19 Power Service Components

**SUPPLEMENT 1069 (2-08-2002). PRE-QUALIFIED AGGREGATE SUPPLIER PROGRAM**

Only pre-qualified suppliers will provide aggregate materials to the Ohio Department of Transportation conforming with the requirements of the Construction and Materials Specifications. This supplement applies to all aggregates provided the Department either directly, or indirectly through a contractor or subcontractor. The program applies to all aggregate materials provided in conformance to or referenced to the 703 section of CMS.

This program is currently considered voluntary but will become mandatory for aggregate materials provided the Department after March 1, 2003.

**SUPPLEMENT 1074 (2-12-2003) REQUIRED FOR CONCRETE PIPE MATERIALS.**

Precast concrete pipe materials will be furnished by producers who are certified under supplement 1074, Concrete Pipe Certification Program. Supplement 1074 will apply to the following construction and materials specifications:

- 603 Pipe Culverts, Sewers, and Drains and the following construction materials
- 706.01 Non-reinforced concrete pipe
- 706.02 Reinforced concrete circular pipe
- 706.03 Reinforced concrete pipe, epoxy coated
- 706.04 Reinforced concrete elliptical culvert, storm drain, and sewer pipe
- 706.06 Perforated concrete pipe
- 706.07 Concrete drain tile

**SUPPLEMENT 1084 (10/18/02) REQUIRED FOR BRIDGE PAINT.**

The Department will accept bridge paint in 708.01 and 708.02 under Supplement 1084.

**CORRECTIONS TO THE 2002 CONSTRUCTION & MATERIAL SPECIFICATIONS**

**202.04**

On Page 91, **Add** the following after the second paragraph, third sentence: "Dispose of all asbestos pipe at a solid waste facility that is licensed by the Local Health Department and permitted by the OEPA."

**202.10**

On Page 95, **Delete** "in a manner that prevents damage to the castings" from the first sentence.

On Page 95, **Revise** the last sentence to "Removed raised pavement markers become the property of the Contractor."

**202.14**

On Page 97, **Add** "and Item 202 Raised Pavement Marker Removed" after the word "Storage" in the first paragraph.

On Page 97, **Add** the following pay item:

202      Each                      Raised Pavement Marker Removed

**304.05**

Page 182, **Add** the following, before the last paragraph  
Make all reasonable attempts to cover the Item 304 Aggregate Base with the next layer of pavement before the end of the construction season. If the aggregate base is not covered up, then assume all liability for the contamination, damage and instability for the base, subgrade and underdrains.

**304.06**

Page 182, **Add** the following, after the first paragraph  
All work must be performed within the tolerances of 304.06. Do not construct the 304 at a consistent depth below the required minimum compacted depth thickness. When the depth is found to be less than the required depth, follow the corrective procedures outlined in Section 304.06.A on pages 264 and 265 of the 2002 Construction inspection Procedures Manual.

**401.02:**

On Page 206, **Add** the following after the last paragraph: Take prompt corrective action if as determined by the Engineer quality control requirements are not being met, unsatisfactory asphalt concrete appearance results or incorporation into the work is unsatisfactory. The Engineer will stop conditional acceptance of the asphalt concrete for failure to correct problems.

**409.03**

On Page 243, **Revise** the first sentence to read: Saw cut, clean, and seal transverse joints as a continuous operation.

**409.03**

On Page 243, **Revise** 1/20" to 1/2"

**410.06**

On Page 246, **Revise** lb/ft<sup>3</sup> to lb/yd<sup>3</sup> in the Table column headings.

**411.04**

On Page 248, **Revise** lb/ft<sup>3</sup> to lb/yd<sup>3</sup> in the Table column headings.

**442.02**

On page 286, **Modify** Table 442.02-1 as follows: Gyration Level and Material Requirements as follows: Ndes = 65, Nmax = 105 regardless of Lane ADTT unless otherwise specified in the plan.

**442.04**

On page 288, Replace the second paragraph of 442.04 with: The minimum total asphalt binder content for a surface course will be 5.7 percent.

**451.16 Opening to Traffic**

**On page 309, Replace** 451.16 with the following:

#### **451.16 Opening to Traffic**

**A. Flexural Strength.** When 7 days have elapsed, the Contractor may use the completed pavement for traffic, including construction traffic. If a modulus of rupture of 600 pounds per square inch (4.2 MPa) has been attained, the Contractor may open the pavement to traffic when 5 days have elapsed. If necessary to open a portion of the pavement in less than 5 days, use high early strength concrete according 499.03 C and obtain a modulus of rupture of 600 pounds per square inch (4.2 MPa).

**B. Crack Repair.** Repair transverse or diagonally cracked full depth pavement, longitudinally cracked full depth pavement, spalled pavement surfaces and any portland cement concrete pavement panels with cementballs or mudballs at no cost to the Department. Perform the repairs until the Department's Form C-85 (Report of Final Inspection and Acceptance) or partial C-85 is issued for the pavement. The issuance of a final C-85 will occur within 30 days after all of the pavement items, including all safety items, are completed and accepted, and the pavement is open to traffic. The issuance of a partial C-85 shall occur within 30 days after the pavement is completed and accepted, and all safety items are in place to allow the pavement to be safely open to traffic during the winter months from December 1 to April 30.

Repair transverse or diagonally cracked PCC pavement with a full depth repair according to 255 and applicable standard construction drawings. Repair cracks by replacing the pavement the full width between longitudinal joints, perpendicular to the centerline and at least 6 feet longitudinally. Install smooth dowel bars at the interface between the original pavement and the replaced pavement section. Locate and size the repairs to ensure that the repair limits are at least 6 feet (1.8 m) away from any transverse joint.

Repair longitudinal cracks within 18 inches (.5 m) of a longitudinal joint by routing and sealing the crack according to Item 423. For longitudinal cracks beyond 18 inches (.5 m), repair the same as for transverse or diagonal cracks stated above.

Repair spalled pavement with Item 256, Bonded patching of Portland cement concrete pavement.

Repair cementballs or mudballs by coring out the area, full depth, with a diamond core bit and replacing the removed concrete with the same concrete as in the pavement. Remove and replace any pavement panel with 5 or more cementballs or mudballs. Locate the limits of the repair along the longitudinal joints and at least 1-foot (0.3 m) past the transverse joints to remove any existing dowel bars. Install smooth dowel bars at the transverse limits of the repairs. Install Type D (Drilled Tied Longitudinal) Joint along the longitudinal limits.

#### **451.17**

On page 309, **replace** 451.17 with the following:

#### **451.17 Pavement Thickness.**

**A. General.** As determined by measurement of cores cut as specified in this section, construct the concrete not more than 0.2 inch (5 mm) less than the specified thickness. Core pavement at the direction of the Engineer and at locations the Engineer determines conforming to Supplement 1064. The Engineer will measure core length conforming to AASHTO T 148.

For the purpose of coring, the Department will consider the entire pavement area of a specified thickness a unit. To determine the number of cores, each pavement unit will be divided into Lots. A Lot consists of 2000 square yards (1650 square meters) of a pavement unit or major fraction thereof.

Take one random core for each Lot but not less than 3 cores for any pavement unit cored. If a core shows a deficiency in thickness of more than 1/2 inch (13 mm) from the specified thickness take additional cores to determine the limits of the deficiency. Follow the procedures below:

- (1) Take a core five (5) feet (1.5 m) longitudinally on both sides of the deficient core. If both the cores are less than 1/2-inch (13 mm) deficient in thickness the zone of deficiency has been determined.
- (2) If either or both 451.17(1) cores are more than 1/2 inch (13 mm) deficient in thickness, cut a core 50 feet (15 m) longitudinally from the deficient core(s). If the 50 feet (15 m) core(s) is more than 1/2 inch (13 mm) deficient, cut additional cores at 100 feet (30 m) longitudinal intervals until a core is less than 1/2 inch deficient; until the pavement ends; or until overlapping an adjacent pavement Lot's core in the same lane.
- (3) If a pavement Lot has cores more than 1/2 inch (13 mm) deficient in thickness and the lot's constructed width is greater than 12 feet (3.6 m) obtain cores transverse to the location of the more than 1/2 inch (13 mm) deficient cores. Obtain transverse cores at a location 1/2 the distance from the deficient core to the furthest edge of pavement. Obtain a transverse cores for each cores more than 1/2 inch deficient.
- (4) The Engineer will use the cores that measure less than 1/2 inch (13 mm) deficient in thickness to define the limits of the deficiency.

If any deficient core is greater than 1 inch (25 mm) deficient in thickness determine the limits of over 1 inch (25 mm) deficiency by following 451.17(1) thru (4) to determine the limits. Remove and replace those deficient areas greater than 1 inch (25 mm) in thickness.

The Engineer will calculate average thickness of concrete pavement placed as follows:

When zones of deficient thickness greater than 1/2 inch (13 mm) to 1 inch (25 mm) are allowed to remain in place, the Engineer will calculate two average thicknesses. A Project Average Thickness (PAT) including all cores not more than 1/2 inch (13 mm) deficient. Cores that exceed the specified thickness by more than 1/2 inch (13 mm) will be considered as the specified thickness plus 1/2 inch (13 mm) when calculating the PAT. A second Deficient Zone Average (DZA) will include all cores with thickness deficiency greater than 1/2 inch (13 mm) to 1 inch (25 mm). The pavement represented by each of the two averages, PAT or DZA, will be calculated and paid separately.

Determine and apply deductions to each separately poured width of pavement

For any pavement areas removed and replaced, re-core those areas replaced following this section of the specifications. Include those core values into the calculations for average pavement thickness.

Unless the Director requests, do not core any widening less than 5 feet (1.5 m) in width or any pavement area less than 2000 square yards (1650 m<sup>2</sup>).

Fill all core holes with concrete of the same proportions and materials used in the pavement.

**B. Price Adjustments.** Based on the pavement average thickness payment will be made as specified in Table 451.17-1.

<b>Table 451.17-1 Concrete Pavement Deficiency</b>	
Deficiency in Thickness as Determined by Core Measurements	Percent of Concrete Unit Bid Price
0.0 to 0.2 inch (0.0 to 5 mm)	100 %
0.3 to 0.5 inch (6 to 13 mm)	$100\% \left[ \frac{PAT}{PST} \right]^6$
0.6 to 1.0 inch (15 to 25 mm) *	$100\% \left[ \frac{DZA}{PST} \right]^{6*}$
Greater than 1.0 inch (25 mm)	Remove and Replace

- The District Construction Engineer will determine whether pavement areas greater than ½ inch (13 mm) up to 1 inch (25 mm) deficient in thickness will be removed and replaced.

PAT = Project Average Thickness  
PST = Plan Specified Thickness  
DZA = Deficient Zone Average

**499.03 1 Table**

On Page 315, in the table **Delete** reference to 612.

**499.03 C**

On page 315, **Replace** the first paragraph of 499.03C with:  
Concrete classes. Using the Concrete Tables, the Engineer will determine the weights of fine and coarse aggregate. The Concrete Table aggregate weights were calculated using the following Saturated Surface Dry (SSD) specific gravities: natural sand and gravel 2.62, limestone sand 2.68, limestone 2.65, and slag 2.30. The assumed specific gravities of Portland cement, fly ash, ground granulated blast furnace slag and micro-silica are 3.15, 2.30, 2.90 and 2.20, respectively. For aggregates with specific gravities differing more than ±0.02 from these, the Engineer will adjust the table design weights as specified in 499.03.D.3.

**499.04 C**

On Page 323, **Replace** reference to (GGFBS) with (GGBFS)

**501.05**

On page 333, **Replace** 501.05 in it's entirety with the following:  
Do not begin work until complying with the acceptance criteria and work limitations specified herein.

Design and perform all procedures as directed by the following specifications except as modified herein: AASHTO Guide Design Specifications for Bridge Temporary Works, AASHTO Construction Handbook for Bridge Temporary Works and AASHTO Standard Specifications for Highway Bridges.

A. Prepare and provide plans listed in this section as follows:

Have an Ohio Registered Engineer prepare, sign, seal and date each plan. Submit plans that will be accepted to all involved railway companies at least 50 days before construction begins. Obtain acceptance from all involved railroad company(s). Furnish the Engineer with copies of all correspondence with the railroad, documentation of railroad acceptance and the plans accepted by the railroad. Department acceptance is not required.

1. Sheeting and bracing of excavations adjacent to the railroad tracks.
2. Demolition of structures over or within 14 feet of railroad tracks.
3. Erection of structural members over or within 14 feet of railroad tracks or that carry rail road traffic.

B. Prepare and provide plans listed in this section as follows:

Have an Ohio Registered Engineer prepare, sign, seal and date each plan. Have a second Ohio Registered Engineer check, sign, seal and date each plan. The preparer and checker are two different Engineers. Include the following statement on the plans: "This plan was prepared in compliance with contract documents."

Submit the plan to the Engineer at least 7 days before construction begins. Department acceptance is not required.

1. Plans for sheeting and bracing adjacent to active traffic when required by contract. Perform all work as specified below:
  - a. Locate sheeting and bracing per contract.
  - b. Maintain temporary horizontal and vertical clearances per contract.
  - c. Design sheeting or bracing to support the roadbed including the effects of AASHTO live and dead load surcharges.
2. Plans for Demolition of structures over or adjacent to active traffic. Perform all work as specified below:
  - a. Provide temporary devices or structures necessary to protect traffic during all demolition activities. Provide traffic protection when demolition is located less than 12' horizontally from active traffic on structures of less than 25' vertical clearance. Increase the 12' minimum horizontal distance 1 foot for each 2 feet of additional height greater than 25'.
  - b. Never lift the portions of structure being removed over active traffic. Before releasing traffic make the remaining structure stable.
  - c. Design traffic protection devices or structures for a minimum load of 50 pounds per square feet plus the weight of equipment, debris and any other load to be carried. Include any portion of the deck that cantilevers beyond the fascia beams or girders.
  - d. In lieu of temporary devices or structures required in "a" above, provide a vertical barrier. Design the vertical barrier with rigid or flexible materials specifically designed for demolition containment. Extend the enclosure up to the bottom of the deck and down to the ground. Maintain all materials free of tears, cuts and holes.
  - e. Maintain temporary horizontal and vertical clearances per contract.



- f. Locate structural members to be reused before performing any removal operations.
  - g. Do not damage structural members being reused during any removal operation.
  - h. Perform work so that all members are stable during all operation and loading conditions.
  - i. Perform work per 501.07.
3. Plans for falsework for cast-in-place concrete bridges over 20 feet (6.1 m) in span. Perform all work per 508 and as specified below:
- a. Provide a camber table to account for the deflection of the falsework loaded with its self weight and the weight of wet concrete. Also include in the table, the specified camber to compensate for slab deflection after the falsework is released.
  - b. Maintain temporary horizontal and vertical clearances per contract.
  - c. As a minimum design false work over waterways for a five year flood or with 75% of the effective waterway opening of the proposed structure. The Contractor is responsible for any damages caused by upstream flooding due to insufficient temporary structure size or the accumulation of debris or sediment in the channel.
  - d. Support falsework foundations located within the ten year flood limits on rock, shale or piles driven to a minimum depth of 15 feet, and to sufficient penetration to carry superimposed loads or until refusal on rock.
- C. Prepare and provide a detailed request showing weld size, length, type and location for welding permanent or temporary attachments to main structural members not shown or permitted by contract. Submit acceptable request to the Office of Structural Engineering for acceptance at least 20 days before construction begins. Perform work per 501.07 and 513.
- D. Perform all work listed in this section as follows. Department receipt or acceptance of a plan is not required.
1. Erect steel or precast concrete structural members as specified below:
    - a. Never lift structural members over active traffic. Before releasing traffic make structural members stable.
    - b. Supply any temporary supports or braces necessary to maintain structural stability and prevent lateral movement until completion of all construction activities.
    - c. Perform work per 501.07, 513 or 515.
    - d. Do not field weld temporary members to permanent steel members.
    - e. Maintain temporary horizontal and vertical clearances per contract
  2. Jack and support existing structures as specified below:
    - a. Support the structure on temporary supports and brace as necessary to maintain structural stability and prevent lateral movement until completion of the permanent supports. Do not

use jacks alone to support the structure except during the actual jacking operation.

- b. Maintain a maximum differential jacking height of 1/4 inch between any adjacent beam lines.
- c. Maintain a maximum differential jacking height of 1 inch between any adjacent abutments or piers.
- d. Place jacks and any load plates at least 2 inches from the edges of any concrete substructure seats.
- e. Do not field weld temporary members to permanent steel members.
- f. Maintain temporary horizontal and vertical clearances per contract

**503.09**

On Page 340, in the first paragraph, **Revise** the reference to 203.03.R to 203.02.R.

**503.10 C**

On Page 342, **Revise** references 503.01.C.1 to 503.10.C.1 and revise 503.01.C.2.a to 503.10.C.2.a.

**513.22 Stud Shear Connectors**

On Page 407, **Add** the following after the second paragraph: Weld stud shear connectors to the top flanges of beams or girders after the steel has been erected and suitable scaffolding or deck forming has been provided. Studs may be welded to beam or girder webs, end dams, bearing plates, or to other secondary members and detail material in the shop.

**515.06**

On page 442, in the first sentence, **Revise** the reference from 501.05 to 501.04.

**516.04**

On page 452, **Revise** the reference to 513.25 to be 711.10

**518.03**

On page 458, in the last paragraph, **Revise** "... 30 percent passing ..." to "... maximum 30 percent passing ..."

**520.11**

On page 468, replace Inspection and Testing with the following: After curing and before final acceptance, sound all patched areas. Remove and replace all unsound or cracked areas. In addition to sounding all patches, the Department will base acceptance of the pneumatically placed mortar on 4-inch (100 mm) diameter cores taken from patched areas and tested for compressive strength. The Engineer will determine the location of the cores, with one core being taken for each 200 square feet (20 m<sup>2</sup>) of pneumatically placed mortar. Drill the cores completely through the patched area and into the underlying sound concrete at least 1/2 inches. Ensure that the depth of the cores is at least 4 inches. The Engineer will visually inspect the cores at the site for hollow areas, sand pockets, voids around reinforcing steel. Test the cores at an independent laboratory for compressive strength. The required minimum average compressive strength is 3000 pounds per square inch (21 MPa) at 7 days, with no single core test less than 2600 pounds per square inch (18 Mpa).

The Engineer will waive coring on small quantities or overhead patches if it is determined by sounding and visual inspection that the patches are sound.

Remove, replace, re-inspect, and re-test all defective patches, as determined by sounding, visible cracks, or unacceptable cores.

Fill core holes with concrete as per 519.

**524.10**

On Page 480, in the first paragraph, **Revise** the reference 750.12 to 705.12.

**601.11**

On Page 491, **Add** the following after the first paragraph:  
“Tied Concrete Block Mats may be used instead of Rock Channel Protection, Dumped Rock, or Riprap with the approval of the Office of Structural Engineering.”

**601.12**

On Page 491, **Add** the following to the first sentence after the word Riprap: “Interlock Concrete Blocks,”

**601.13**

On Page 492, **Revise** the Tied Concrete Block Mat description to read:  
“Tied Concrete Block Mat, Type \_\_\_\_.”

**601.13**

On Page 492, **Add** pay item: “601 Square Yard (Square Meter) Interlock Concrete Blocks”

**602.03 C** second group

On Page 494, **Revise** the section that begins “Ensure that non-approved...” to read:  
“Submit non-approved designs with the manufacturer’s structural design criteria, analysis method and structural details for approval. Re-submit designs for approval when manufacturers change their designs.”

**603.02**

On Page 499, **Add** the following under Type F conduits:  
“Corrugated Polyethylene Drainage Tubing sizes 4, 6, 8 inch (100, 150, 200 mm). 707.31.”

**603.03**

On Page 502, **Add** the following paragraph at the end of section 603.03.A:  
“If plastic pipe is used and the ID is 8 inch (200 mm) or less furnish a minimum trench width of the OD”

**603.06**

On Page 505, **Add** the following to the second to last sentence in the last paragraph:  
“Install the ties or strapping in the first or second valley of the annular corrugations on each end of each piece of pipe. Install two struts per end such that they are perpendicular to one another and cross at their midpoints.”

**603.08**

On Page 508, **Add** the following paragraph C at the end of section for Backfill Types A and B conduits except for long span structures: “C. For plastic pipe with an ID 8 inch (200 mm) or less, place and compact structural backfill above the bedding for the full depth of the trench.”

**603.08**

On Page 509, at the top of the page **Revise** "Backfill Type C conduits..." to be: "Backfill Type C and D conduits..."

**603.08**

On Page 509, **Add** the following paragraph C at the end of section for Backfill Type C conduits: "C. For plastic pipe with an ID 8 inch (200 mm) or less, place and compact structural backfill above the bedding for the full depth of the trench."

**Add** the following paragraph at the end of the section:

"Type F conduits for underdrain outlets backfill per 605.03.C."

**603.08**

On Page 509, in the middle of the page **Revise** "Types D and F conduits above the bedding..." to be: ""Type F conduits above the bedding..."

**603.13**

On Page 513, **Add** the following pay item:

"603 Foot (Meter) Conduit, Type F for Underdrain Outlets"

**605.02 B**

On Page 518, **Revise** the section title to read: "B. Pipe for 605 Rock-Cut Underdrains, or Shallow Underdrains"

**605.06**

On Page 521, **Delete** the second sentence which reads "For the backfill use structural backfill Type 1 as defined in Item 603."

**605.09**

On Page 522, **Add** the following pay item: "605 Foot (Meter) Shallow Underdrains."

**614.08**

On Page 551, in the first sentence of the second paragraph **Delete** "Part 7".

**614.11 A**

On Page 552, in the first sentence of the first paragraph **Revise** "1047" to "1087".

**614.115**

On Page 557, **Add** the following new section between 614.11 and 614.12:

**614.115 Work Zone Raised Pavement Markers.** Furnish, install, maintain and subsequently remove work zone raised pavement markers (WZRPMs). Work zone raised pavement markers may serve as a substitute for, or supplement to, work zone pavement markings. They are provided in both yellow and white versions to match the appropriate pavement marking color.

White units provide reflectoration in one direction while yellow units may provide reflectoration in either one direction or two They are available as units which are readily visible both night and day as a result of retroreflectors and brightly colored (white or yellow) housing (Type A) or visible only at night due to their retroreflectors (Type B).

**A. Materials.** Prequalify work zone raised pavement markers according to Supplement 1056.

Only use adhesives that are recommended by the reflector manufacturer and are not epoxy.

Provide markers of sufficient strength and properly shaped so as not to be dislodged or broken by impacts from vehicle tires, including those of high pressure truck tires loaded to 4500 pounds (2040 kilograms).

Provide reflectors having an area of 0.35 square inches (225 square millimeters) for Type A or 3.0 square inches (1935 square millimeters) for Type B. The brightness or specific intensity (when tested at 0.2 degree angle of observation and the following angles of incidence) meet or exceed the following:

TYPE	SPECIFIC INTENSITY		
	INCIDENCE ANGLE	WHITE	YELLOW
A	0	1.0	0.6
A	20	0.4	0.24
B	0	3.0	1.8
B	20	1.2	0.72
B	45	0.3	0.2

Angle of incidence: Formed by a ray from a light source to the marker and the normal to the leading edge of the marker face (also horizontal entrance angle)

Angle of observation: Formed by a ray from a light source to the marker and the returned ray from the marker to the measuring receptor

Specific intensity: The mean candlepower of the reflected light (at given incidence and divergence angles) for each footcandle (10.7 lux) at the reflector (on a plane perpendicular to the incident light)

Type A markers, when viewed from above, have a visible area of not less than 14 square inches (9030 square millimeters). When viewed from the front, parallel to the pavement, as from approaching traffic, Type A markers have a width of approximately 4 inches (100 mm) and a visible area of not less than 1.5 square inches (970 square millimeters).

**B. Patterns.** The patterns of WZRPMs required for the various types of pavement markings are shown in Table 614.115-1.

**TABLE 614.115-1**

<b>SUPPLEMENTAL DELINEATION (TYPE A OR B)</b>		
<b>TYPE OF LINE</b>	<b>COLOR</b>	<b>SPACING</b>
Edge Line	1-way white or yellow	20' (6.0 m) c/c
Lane Line	1-way white	40'(12.0 m) c/c or at center of gap
Dashed Center Line	2-way yellow	40'(12.0 m) c/c or at center of gap
Double Center Line	2-way yellow	2 units; 20' (6.1 m) c/c
Channelizing Line	1-way white	10'(3.0 m) or 20'(6.0 m) c/c
Exit Gore(Outline)	1-way white	10'(3.0 m) c/c
<b>SIMULATED DELINEATION (TYPE A ONLY)</b>		
<b>TYPE OF LINE</b>	<b>COLOR</b>	<b>SPACING</b>
Edge Line	1-way white or yellow	10'(3.0 m) c/c
Edge Line on 1-Lane, 2-Way	1-way white & 1-way yellow	white & yellow units back-to-back** 10' (3.0 m)
Lane Line	1-way white	3 units at 5'(1.5 m) c/c;30'(9.0 m) gap
Dashed Center Line	2-way yellow	3 units at 5'(1.5 m) c/c;30'(9.0 m) gap
Double Center Line	2-way yellow	2 units*;10' (3.0 m)c/c
Channelizing Line	1-way white	5'(1.5 m)c/c
Exit Gore(Outline)	1-way white	5'(1.5 m)c/c

\*Place units side by side about 4 inches (100 mm) apart.

\*\*Face the proper color and reflector to the oncoming traffic. Place the units back to back about one quarter inch (6.0 mm) apart.

C. Installation. Attach work zone raised pavement markers to clean dry and sound pavement. Remove all loose gravel, sand and dirt from the area of the line. The minimum pavement temperature for installation is 50 degrees F (10 degrees C). When markers are attached to new concrete pavement with curing compound remaining, remove the curing compound membrane by sandblasting or other mechanical cleaning method. Install markers in accordance with the manufacturer's recommendations.

Work zone raised pavement markers are not suitable for use from October 15 to April 1. If the Contractor elects to start or continue work zone pavement markers during this period, and they fail or are subsequently removed or destroyed by snow and ice control activities, immediately, at his expense, provide a substitute traffic guidance system which is effective during day and night and which is acceptable to the Engineer. Other than for replacement of failed WZRPMs, new installations of WZRPMs are not permitted from October 1 to April 1.

Place markers accurately to depict straight or uniformly curving lines. The longitudinal location of WZRPMs are described in Table I except that the spacing of an individual WZRPM may be varied by as much as 2 feet (0.6 m) or 10 percent of the nominal spacing in order to avoid poor pavement conditions, but the average spacing remains unchanged. Poor pavement conditions include separated joints, cracks, deteriorated pavement, usually uneven pavement or where pavement marking material will interfere with the bond.

The lateral location of WZRPMs follows:

- A. Edge Lines: Offset 12 inches (300 mm) outside the work zone pavement marking, if any, or the theoretical edge of the lane, but this offset may vary +6 inches (150 mm) as necessary to avoid poor pavement conditions.
- B. Lane lines and dashed center lines: Locate the WZRPM in the center of the gap between pavement marking dashes, if any. If a pavement joint exists, provide the marker with 2 inches (50 mm) clear distance from it (and to the left of it for lane lines). Otherwise, center the WZRPM on the theoretical edge of lane.
- C. Double center line: Install each WZRPM of the pair in line with the appropriate pavement marking stripe, if any. If the edge of lane is demarcated by a crack or joint, the pair of WZRPMs straddle the joint and each is installed approximately 2 inches (50 mm) clear from the joint. Otherwise center the pair on the theoretical edge of lane.
- D. Channelizing Line: In line with the pavement marking stripe or immediately adjacent to the line, except when used at exit gore outlines where the WZRPM is installed within the painted gore vee and approximately 12 inches (300 mm) from the pavement marking stripe. WZRPMs will not be placed directly on a painted line.

D. Replacement. Maintain WZRPMs in good condition. Markers have failed when: the marker is broken, the marker is worn to the extent that daytime visibility is significantly diminished or of an unacceptable color (type B only), reflectors are broken or detached, markers are detached from the adhesive, the adhesive is detached from the pavement or if markers or reflectors are covered by tar or paint.

Individual replacement of each failed marker as it occurs is not recommended due to increased exposure of workers to traffic. However, maintain the following minimum levels of marker effectiveness:

- A. For a given line, no more than 20 percent of the WZRPM units failed in any manner;
- B. For a segment of any line, the number of failed units do not exceed the maximums permitted in Table 614.115-2.

**TABLE 614.115-2**

Line Type	Normal Spacing Feet (Meter)	Segment Length Feet (Meter)	Normal No. Contained In Segment	Maximum No. Permitted To Fail
Edge	10(3.0) 20(6.0)	5(1.5) 100(30.0)	6	3
Center, Double/Solid	20(6.0) 10(3.0)	100(30.0) 50(15.0)	12	6
Lane or Dashed Center	40(12.0) 5(1.5)	200(60.0) 1-Stripe	6	3
Channelizing	20(6.0) 10(3.0) 5(1.5)	100(30.0) 50(15.0) 25(7.5)	6	3

Replace all failed units within any line or segment before conditions deteriorate below the minimums established in Table 614.115-2. Replace all failed units within the line or segment within 24 hours after notification by the Engineer.

E. Removal. Accomplish removal of work zone raised pavement markers in such a manner that no adhesive remains on the pavement. Permanent pavement surfaces are not to be scarred, broken or significantly roughened.

**621.01**

On Page 573, **Delete** the second paragraph.

**621.03.D**

On Page 574, **Replace** with the following:

Closer than 6" (150 mm) to a pavement construction (transverse or longitudinal) joint or within an intersection.

**621.03**

On Page 574, **Replace** the first and second sentences of the third paragraph with the following: RPMs along double yellow centerline are to be placed no closer than 6" (150 mm) to a pavement construction (transverse or longitudinal) joint. RPMs installed along a channelizing line are to be placed no closer than 1 inch (25 mm) from the edge of the painted line and no closer than 6" (150 mm) to a pavement construction (transverse or longitudinal) joint.

**Add** the following to the last sentence of the third paragraph:

"no closer than 6" (150 mm) to a pavement construction (transverse or longitudinal) joint."

**621.04**

On Page 574, **Revise** the first sentence of the first paragraph to the following:

Cut parallel slots with a minimum 1/8 inch (3 mm) clearance on each side for installing RPM castings.

On Page 575, **Delete** "or other means approved by the Engineer" from the last sentence of the third paragraph.

On Page 575, **Add** "and sealed" to the end of the third sentence in the seventh paragraph.

On Page 575, **Revise** the fourth sentence of the eighth paragraph to the following:  
Apply adhesive in a single bead, sufficient to squeeze out all sides when pressure is applied to seat and seal the reflector.

**623**

On Page 580, **Revise** 623.03 to Method of Measurement and **Add** 623.04 Basis of Payment

**623.02**

On Page 582, **Add** the following to end of general section:

If the Contractor elects to perform any portion of the projects construction layout by electronic methods according to Item 623, then provide the Department's Project Engineer with a real time survey grade global positioning satellite (GPS) receiver and data collector. Provide a device that has a radio able to receive real time correctors and has an accuracy of 0.05 of a foot in both horizontal and vertical from true stationing. These requirements will permit the Department to verify the construction layout, perform check sections, and document pay items.



Provide all 3D models, control points, alignments, templates, and all other pertinent design files and information used to construct the project, including, but not limited to: DEM's (digital elevation models), DTM's (digital terrain models), TIN's (triangulated irregular network), DXF's (drawing exchange formats), DWG's (autocad files), DGN's (microstation), PRO's (terramodel)...ect." Provide the computer to run the necessary software.

Provide the technical assistance to the Engineer and train the Engineer on how to use the provided equipment and software. Sixteen hours shall be spent with the authorized manufacture representative, the engineer, and the contractor.

Upon completion of the project, this equipment will remain property of the Contractor.

**623.03**

On Page 582, **Add** 623.03 Method of Measurement. The Department will measure the number of Providing Electronic Instrumentation by each. The Department will measure the amount of Technical Assistance by the hour.

**623.04**

On Page 582, **Revise** 623.03 to read as follows:

623.04 Basis of Payment. The Department will pay for the accepted quantities at the contract prices as follows:

Item	Unit	Description
623	Lump Sum	Construction Layout Stakes
Special	Each	Providing Electronic Instrumentation
Special	Hours	Technical Assistance

**630.04**

On page 606, **Revise** the sixth sentence of the first paragraph to: "For reflective legends and route shields, use direct applied reflective sheeting."

On page 606, **Delete** the eighth sentence of the first paragraph.

**630.04**

On page 605, the first sentence in the third paragraph of Section 630.04 is **Replaced** with the following: "For flat sheet and ground mounted extrusheet signs, use Type G, H or J reflective sheeting for background and reflective legends. For overhead extrusheet signs, use Type G reflective sheeting for the background, and use Type H or J reflective sheeting for reflective legends, shields and symbols (including hazardous cargo plate, airport symbol, arrows and borders)."

**630.04**

On page 605, the last paragraph is **Revised** to: "Use fluorescent yellow green reflective sheeting for the following signs: SCHOOL (S4-3), School Crossing (S1-1), yellow portions of school speed limit (S5-H3, S5-H4, S5-H5), SCHOOL ENTRANCE (S3-H3), SCHOOL BUS STOP AHEAD (S3-1), SCHOOL BUS TURN AHEAD (S3-H2), Bicycle Crossing (W11-1), Pedestrian Crossing (W11-2), Handicap Crossing (W11-9), SAFETY ZONE (W11-H15), and Playground (W15-1). Fabricate supplemental signs [such as SHARE THE ROAD (W16-1), Advisory Speed Plate W13-1), and Distance Plates (W16-2, W16-2a, W16-3, W16-3a)] from fluorescent yellow green sheeting when used with a sign above."

**630.14**

On Page 613, **Add** the following after the first paragraph in the section: "The Department will measure Foundations for ground mounted beam supports, rigid overhead sign supports and span wire supports by the number of each for one beam, pole, end frame or strain pole, and will include excavation, reinforcing steel, concrete, backfilling and disposal of surplus excavation."

**630.15**

On page 617, the pay item for "Sign" in Section 630.15 is **revised** to read as follows: "630 Square Foot Sign, (Flat Sheet, Ground Mounted Extrusheet, Overhead Extrusheet, (Square Meter) Temporary Overlay)"

**631.09**

On Page 621, in the fourth paragraph, last sentence **Revise** "R-10S" to "S5-H3".

**631.12**

On Page 622, **Revise** the seventh paragraph reference to "support arm" to "attachment hardware"

**633.04**

On Page 643, **Revise** "625.05" to "625.04."

**633.06 C Traffic Signal Controllers**

On Page 645, **Revise** Supplement 1060 to Supplement 1076

**633.08**

On page 645 in the first paragraph, second sentence, **delete** the phrase "and at least 18 inches (0.5m) from the groundline or sidewalk level."

**641.02**

On Page 671, **Add** the following paragraph after the first paragraph: "Furnish the Engineer, prior to application, the paint manufacturer's printed application equipment requirements and application instructions."

**641.11**

On Pages 675 and 676, **Replace** 641.11 with the following:

641.11 Deduction for Deficiency. Each day, the Engineer will compute the amount of marking material (including resin, catalyst, primer, adhesive, or activator) and glass beads applied per unit of measurement. The Department will reduce the contract unit price in direct proportion to the percent of deficiency of marking materials or glass beads as specified in the application subsection of each pavement marking material, up to 20 percent for each material deficient. The Department will only use the greater deficiency of marking materials or glass beads to compute the deduction.

If the deficiency of marking materials or glass beads is 20 percent or more, the Department will consider the work unsatisfactory and require correction according to Items 642, 643, 644 or 646. Long line markings will be measured at ten mile intervals for long sections or full route length/section as per plan quantities for less than ten mile sections for determining unsatisfactory sections. Replace all sections determined to be unsatisfactory. Replaced lines will be retraced at the full thickness specified by 642, 643 and 646. Replace unsatisfactory thermoplastic lines to meet the requirements of 644 or apply minimum 30 mils additional material to achieve 644.04 application thickness.

Material applied without written approval of the Engineer outside the temperature or application speed requirements will be considered unsatisfactory and will be replaced per above. If exception is granted by the Engineer, all such exceptions will be documented. Provide glass beads per 642, 643, 644 and 646 in all retraced unsatisfactory lines.

**642.04**

On Page 677, **Replace** the second paragraph with the following:  
Apply 20 mil thick paint at the following rate:

	20 Mil Thick paint Gallons per Mile of Line					20 Mil Thick paint Liter per Kilometer of Line				
	Width of Line (inches)					Width of Line (mm)				
	4	6	8	12	24	100	150	200	300	600
<b>Solid Line</b>	22	33	44	66	132	50	75	100	150	300
<b>Dashed Line</b>	5.5	8.25	11	16.5	33	12.4	18.6	24.8	37.2	74.4
<b>Dotted Line</b>	7.15	10.75	14.3	21.45	42.9	16.4	24.6	32.8	49.2	98.4
<b>Areas, Symbols, Words</b>	1.33 gallon per 100 square feet					0.53 L/m <sup>2</sup>				

**Delete** sentence “increase the first application of paint to new asphalt pavement surfaces by 25 percent over the specified rate.”

**642.04**

On Page 678, **Replace** the first sentence with the following: “Apply the glass beads at the rate of at least 12 pounds (1.4 kg) of glass beads per gallon (liter) of paint applied in a manner that provides uniformly retroreflective lines.”

**644.04**

On Page 682 , **Replace** the last sentence with the following: “Apply thermoplastic at a thickness of 0.125 inches (3 mm).”

**645.05**

On Page 686, in the first sentence **Revise** 642.12 to 641.12.

**647**

Throughout the section, **Revise** "plastic" to "thermoplastic".

**647.02**

On Page 693, Revise the list as follows:  
Heat-fused preformed thermoplastic pavement marking material.....740.08  
Glass beads.....740.10

**647.03**

On Page 693, **Replace** the first paragraph with:  
Use manufacturer recommended equipment to apply the heat-fused preformed thermoplastic pavement marking material according to the appropriate type, as follows:

**647.03 A**

On Page 693, **Revise** "Type A" to "Type A90 or Type A125".

**647.03 B**

On Page 693, **Replace** with the following:

B. Type B90 or Type B125 Material.

1. Propane torch for ensuring no moisture is present on the pavement and heating the material according to 647.04.C.
2. A thermometer is not required.

**647.04 A**

On Page 693, **Replace** the first sentence with:

Apply the heat-fused preformed thermoplastic pavement marking material to clean, dry pavement surfaces according to the appropriate type unless otherwise directed by the manufacturer's recommendation.

On Page 693, **Delete** the third paragraph.

**647.04 B**

On Page 694, **Revise** "Type A (90-mil thickness)" to "Type A90 and Type A125".

On Page 694, **Revise** 350 F(177 C) to 300 F(149 C).

On Page 694, **Replace** the second sentence with:

Place the material on the warm surface as soon as practical, then uniformly post-heat to 400 F(205 C).

On Page 694, **Revise** "extended" to "extend" in the fourth sentence.

On Page 694, **Replace** the second paragraph with:

Type A90 and A125 material shall contain intermix beads throughout. Drop-on glass beads are not required unless using a non-surface beaded marking (i.e., for turn or combination arrows).

**647.04 C**

On Page 694, **Replace** with the following:

C. Type B90 and Type B125 Material Application on Asphalt Concrete and Portland cement Concrete Pavements. Heat the pavement only to ensure no moisture is present. Place the material on the dry surface and then uniformly heat the material until it bubbles and changes color to off-white. Material must be able to be applied with no preheating of the pavement to a specified temperature and without the use of a thermometer. Allow the material to cool naturally and solidify before exposing it to traffic.

Type B90 and B125 material shall contain intermix glass beads throughout. Drop-on glass beads are not required unless using a non-surface beaded marking (i.e., for turn or combination arrows).

**659.02 A**

On page 705, **add** the following after the third sentence:

If liquid lime is used then use the following application table to achieve a pH of 6.5 or greater. Calculate the difference between the soil pH and 6.5 pH.

Difference	.25	.50	.75	1.0
application rate in gals/ac (L/ha)	2.5 (4)	5 (8)	10 (15)	20 (30)

Example: soil test pH=5.75 required pH=6.5 difference= .75 required application rate is 10 gals/ac (15L/ha) only use liquid lime on the QPL list. Provide the Engineer with the

liquid lime manufacturers written application rate. The Engineer will only accept printed application rates.

**659.02 B**

On page 705, **add** the following after the third sentence:  
If liquid lime is used then use the following application table to achieve a pH of 6.5 or greater. Calculate the difference between the soil pH and 6.5 pH.

Difference	.25	.50	.75	1.0
application rate in gals/ac (L/ha)	2.5 (4)	5 (8)	10 (15)	20 (30)

Example: soil test pH=5.75 required pH=6.5 difference= .75 required application rate is 10 gals/ac (15L/ha) only use liquid lime on the QPL list. Provide the Engineer with the liquid lime manufacturers written application rate. The Engineer will only accept printed application rates.

**659.03**

On page 705 first sentence, **Replace** granular lime with granular or liquid lime.

**659.03**

On page 705 second sentence, **Replace** lime with granular lime.

**659.03**

On page 705 fifth sentence, **Replace** lime with granular lime.

**659.03**

On page 706 after the first paragraph, **Add:** If using liquid lime apply liquid lime at a rate of 5 gals/acre (8 L/ha) unless other wise required per the soil or topsoil test. Provide the Engineer with the liquid lime manufacturers written application rate. The Engineer will only accept printed application rates. Only use liquid lime on the QPL list.

**659.10 B**

On page 716 third paragraph, second sentence, **Replace** lime with granular lime.

**659.10 B**

On page 716 third paragraph, after the second sentence, **Add:** Do not mix liquid lime into the soil or topsoil. Only apply liquid lime to the top of the soil or topsoil.

**659.24**

On page 721 third paragraph, **Delete** "and Agricultural Lime" and **Add** at the end of the paragraph: The Department will measure lime or liquid lime by the number of acres (ha) covered.

**659.25**

On page 722 fourth pay item, **Replace** "Ton (Kilogram) Agricultural Lime" with Acres (ha) Lime.

**700 Table**

On Page 745, **Revise** the glass bead reference 740.10 to 740.09.

**700 Table**

On Page 746, in the table **Delete** reference to 521 under Lumber.

**703.01**

On page 755 under General, **Add** "The following abbreviations apply:

CCS- Crushed Carbonate Stone.

ACBFS- Air Cooled Blast Furnace Slag

GS- Granulated Slag

RPCC- Recycled Portland Cement Concrete

OH- Open Hearth Slag

EAF- Electric Arc Furnace Slag

BOF- Basic Oxygen Furnace Slag"

**703.01 D**

On Page 756, **Revise** Insoluble residue of carbonate aggregate reference to: ASTM D3042.

**703.02 A.3**

On Page 762, **Delete** reference to 612 in the Table.

**703.02 A.3**

On page 762 **Revise** Aggregations of soil, silt, etc. by weight from .05 to 0.5

**703.02 B Table**

On Page 763, in the table **Add** Lightweight pieces 0.25 1.0.

**703.03 B**

On page 764 **Revise** Aggregations of soil, silt, etc from .05 to 0.5

**703.04 B Table**

On Page 765, in the table **Delete** Lightweight pieces 1.0.

**703.05 B**

On page 766, in the table **Delete** lightweight pieces 1.0

**703.05 B.2 Table**

On Page 766, in the table **Delete** Lightweight pieces 1.0.

**703.11**

On Page 768, **Add** the following after the first paragraph: "Furnish ACBF Slag that conforms to Supplement 1027."

**703.11 B.1**

On page 770, **Revise** "703.05" to "703.05.A" and "703.02" to "703.02.A".

**703.18**

On Page 782, **Add** the following note: "Materials furnished for 617 may not conform to B. Physical properties for Percent of loss, sodium soundness test; and Percent of wear, Los Angeles Test."

**703.19**

On Page 784, **Revise** the following in the last sentence of the first paragraph: "according to AASHTO 103 as stated in 703.19.A."

**705.04**

On Page 786, **Remove** references to Type 3 Membrane Primer.

**706.02-2M Table**

On Page 802, in the sixth column, **Revise** 51 to 5.

**706.02-4 Table**

On Page 806, in the fourth column, **Revise** 0.13 to 1.30, and 0.14 to 1.38.

**706.13 4.1.5**

On Page 828, **Revise** the section that begins "Provide epoxy coated steel." to read: "Provide steel conforming to 709.01, 709.08, 709.10 or 709.12. Provide epoxy coated steel conforming to 709.00 for the manhole flat slab tops, catch basin tops and inlet tops only."

**707.01**

On Page 829, **Add** the following after the first paragraph:  
7.5 Ensure either helical lock or continuous welded seams are used.

**707.02**

On Page 832, **Add** the following after the first paragraph:  
7.5 Ensure either helical lock or continuous welded seams are used.

**707.05**

On Page 834, **Revise** the second sentence to read: "Provide either Type B half bituminous coated pipe, or pipe arches with paved invert or Type C fully coated pipe, or pipe arches with paved invert."

**707.07**

On Page 834, **Revise** the second sentence to read: "Provide either Type B half bituminous coated pipe, or pipe arches with paved invert or Type C fully coated pipe, or pipe arches with paved invert."

**710.06**

On Page 864, **Revise** Supplement 1067 to Supplement 1042

**721.01**

On page 887, **Replace** this section with: Ensure that the casting is nodular iron conforming to ASTM A 536, hardened to 45 - 54 RC, snow plowable in the two opposing longitudinal directions and designed to accommodate a replacement prismatic retroreflector.

**725.08**

On Page 894, **Add** the following paragraph at the beginning of Section 725.08: "Ensure that manufacturers of precast concrete members are certified by the Laboratory according to Supplement 1073."

**730.18**

On page 921, **Delete** the first sentence.

**730.192**

On page 922, the minimum coefficient of retroreflection for fluorescent orange sheeting at an observation angle of 0.2 and entrance angle of +30 is **Revised** to 85 cd/fc/ft<sup>2</sup> (cd/lx-1'm<sup>-2</sup>).

**730.192**

On page 923, the following text is **Added** at the end of Section 730.192:  
Furnish fluorescent yellow reflective sheeting conforming to ASTM D 4956, Type VII or VIII, including supplemental requirement S1, and the following requirements:

A. The color specification limits for fluorescent yellow are as shown for yellow in ASTM D 4956, Table 13. The minimum luminance factor (Y%) is 45. The minimum fluorescence luminance factor (YF%) is 25.

B. The photometric requirements for fluorescent yellow sheeting are as follows:

Observation Angle (degree)	Entrance Angle (degree)	Minimum Coefficient of Retroreflection cd/ft <sup>2</sup> (cd lx <sup>-1</sup> ·m <sup>-2</sup> )
0.2	-4	375
0.2	+30	170
0.5	-4	165
0.5	+30	85

**730.193**

On page 924, the following text is **Added** at the end of Section 730.193:  
Furnish fluorescent yellow reflective sheeting conforming to ASTM D 4956, Type IX, including supplemental requirement S1, and the following requirements:

A. The color specification limits for fluorescent yellow are as shown for yellow in ASTM D 4956, Table 13. The minimum luminance factor (Y%) is 45. The minimum fluorescence luminance factor (YF%) is 25.

B. The photometric requirements for fluorescent yellow sheeting are as follows:

Observation Angle (degree)	Entrance Angle (degree)	Minimum Coefficient of Retroreflection cd/ft <sup>2</sup> (cd lx <sup>-1</sup> ·m <sup>-2</sup> ).
0.2	-4	240
0.2	+30	150
0.5	-4	165
0.5	+30	75
1.0	-4	45
1.0	+30	24

**733.03 C.6**

On Page 966, **Revise** Supplement 1060 to Supplement 1076

**740.01**

On Page 987, **Add** the following paragraph: "Conform to Supplement 1089 for approval and shipment of 740."



**740.02**

On Pages 987, 988 and 989, **Replace** 740.02 with the following:

**740.02 Traffic Paint.** Furnish white and yellow ready-mixed traffic paint suitable for marking various types of pavement. Ensure that the manufacturer formulates the traffic paint type 2 in such a manner as to meet the requirements of this specification. Furnish traffic paint type 1 pre-qualified according to Supplement 1047.

Furnish paint that is a suitable binder for glass beads on pavement exposed to traffic. Furnish paint that will not deteriorate in storage, within one year after date of receipt, to the extent that it cannot be readily broken up with a paddle to a smooth uniform paint capable of easy application by spray.

Furnish paint that does not bleed or discolor when sprayed on asphalt concrete surfaces.

Type 1 paint is the fast dry, water-based 100 percent acrylic type.

Type 2 paint is the fast dry, alkyd type.

Ensure that all paint conforms to the following requirements:

	<b>Minimum</b>	<b>Maximum</b>
1. Consistency, Krebs units:		
Type 2	90	110
2. Dry Time (No Track), minutes:	--	2
Type 2		
3. Prime Pigment Content, percent by weight of paint:		
Type 2 white	17.0	--
yellow	17.0	--
4. Pigment Content, percent by weight of paint:		
Type 2 white	--	61
yellow	--	61
5. Nonvolatile Vehicle Solids Content, percent by weight of paint:		
Type 2 white	12	--
yellow	12	--
6. Fineness of Grind, micrometers:		
Types 2	50	--
7. Bleeding Ratio, D 969:		
Type 2 white	0.95	--
yellow	0.93	--

8. Color:		
a. White, Daylight Directional Reflectance, ASTM E 1347: Type 2	91	--
b. Yellow 1. Refer to Highway Yellow Color Tolerance Chart PR Color No. 1, June, 1965 U.S. Dept. of Transportation, FHWA: Yellow, Color Difference 595-33538, ASTM D 2244 I Measure E, L, a, b as Cielab, Source "C"		
Type 2		
L	1.5	5.5
a	0.5	9
b	0.5	15
9. Flexibility, all types and colors		
TT-P-85E		
Type 2	--	Passes

**740.08**

On Pages 996 and 997, **Replace** with:  
740.08 Heat-Fused Preformed Thermoplastic Pavement Marking Material. Furnish heat-fused preformed thermoplastic pavement marking materials conforming to the following:  
Type A90 and Type B90 - 90 mil thickness (2.29 mm)  
Type A125 and Type B125 - 125 mil thickness (3.18 mm)

**740.10**

On Page 997, **Revise** section 740.10 to 740.09.

**740.10** (changed to 740.09 above)

On Page 997, **Revise** Type A as follows:  
A. Type A. Furnish Type A glass beads for traffic paint conforming to Supplement 1008 and to AASHTO M 247, Type 1 without flotation properties but dual coated (for moisture resistance and adhesion), with the following exception: 4.5 Flotation Test.

**748**

Throughout the section, **Replace** references to C500 with C509.

**748.02**

On Page 1000, **Replace** the first sentence in the first paragraph: "Furnish PVC pipe conforming to AWWA C900, AWWA C905, AWWA C909, or ASTM D2241."

**748.06**

On Page 1001, in the Wall Thickness Table **reverse** the first two rows metric and English columns.

**748.08**

On Page 1001, paragraph one, **Replace** gate valves with ductile iron gate valves. After paragraph two **insert**: "Provide gate valves from suppliers listed on the Department's Qualified Products List."

**748.15**

On Page 1003, paragraph three, **Replace** 1/4" diameter with 1" (25mm) diameter or 1" (25mm) square. And **Delete**: "Use U.S. Standard Pipe thread between the operating nut and the stem".

On Page 1003, paragraph six, **Replace** "screw into the hydrant body casting using U.S. Standard Pipe threads" with "lock into the hydrant body using locking lugs or threads".

### **BIDDER'S CHECKLIST**

- ADDENDA

### **BID GUARANTY**

- Cashier's Check
- Certified Check
- Bid Bond
- Annual Bid Bond

### **IF BID BOND**

- Signed By Bidder & Surety Agent
- Power of Attorney-Proper Agent Name and Date
- Current Financial Statement of Surety
- Current Certificate of Insurance for Surety from Department of Insurance
- Annual Bid Bond Certificate

### **SUPPLEMENTAL QUESTIONNAIRE**

### **ADDITIONAL REMINDERS**

- Circled and Checked Appropriate EEO Requirement
- Reviewed Proposal for Mathematical Errors
- Bid Proposal Signed by Officer of Company

### **DISCLAIMER**

This checklist is not intended to relieve the bidder of the responsibility to provide other required documents. Rather, this checklist is offered merely to serve as an aid in assisting in the preparation of the bid. Notice is hereby given that the failure to submit all required documents duly and properly constituted including but not limited to all required signatures may result in the rejection of your bid on the basis that the bid is non-responsive.

### **NOTICE OF PREQUALIFICATION CHANGES**

Due to recent changes in Ohio law many of the Departments prequalification requirements have been revised. For example, the list of work types has been revised to 54 from 118. As a result of this revision the Department will indicate the work type required for each pay item. If the line item does not have a corresponding work type, NR will be shown in the work type column. This proposal note will govern the assignment of work types to pay items.

However, the prime contractor may perform incidental work items for which he does not hold the required work type provided the cost of the work does not exceed 5% of the total bid. The 5% will not change with an addition or deletion during the pendency of the contract.

Listed below are the work types for this proposal. In accordance with Ohio law, a bidder must possess work types, and perform work equal to at least fifty percent of the total amount of the submitted bid price. The Director may, by insertion of a contract provision, reduce the fifty percent amount.

**WORK TYPE CODES AND DESCRIPTIONS**

<b>WT Code</b>	<b>Work Type Description</b>	<b>WT Code</b>	<b>Work Type Description</b>
1	Clearing & Grubbing	29	Structure Repairs
2	Building Removal	30	Hydrodemolition
3	Gas, Oil, Water Well Abandonments	31	Structural Steel Repairs
4	Roadway Excavation & Embankment Construction	32	Heat Straightening
5	Major Roadway Excavations	33	Tieback Installation
6	Incidental Grading	34	Earth Retaining Structures
7	Soil Stabilization	35	Drainage (Culverts, Misc.)
8	Temporary Soil Erosion & Sediment Control	36	Guardrail / Attenuators
9	Aggregate Bases	37	Fence
10	Flexible Paving	38	Misc. Concrete
11	Apply Bituminous Treatments	39	Maintenance of Traffic
12	Rigid Paving	40	Waterproofing
13	Pavement Planning, Milling, Scarification	41	Raised Pavement Markers
14	Concrete Texturing	42	Signing
15	Sawing	43	Highway Lighting
16	Flexible Replacement	44	Traffic Signals - Standard
17	Rigid Pavement Replacement	45	Pavement Markings
18	Pavement Rubbilizing, Breaking, Pulverizing	46	Landscaping
19	Structure Removal	47	Mowing
20	Level 1 Bridge	48	Trucking
21	Level 2 Bridge	49	Herbicidal Spraying
22	Level 3 Bridge	50	Railroad Track Construction
23	Reinforcing Steel	51	Micro Tunneling
24	Structural Steel Erection	52	Tunneling
25	Stud Welding	53	Piling
26	Structural Steel Painting	54	Post-Tensioning Bridge Members
27	Expansion & Contraction Joints, Joint Sealers, Bearing Devices	55	Fiber Optic Cable Installation, Splicing, Termination and Testing – Traffic Signal System
28	Caissons / Drilled Shafts	56	Fiber Optic Cable Installation, Splicing, Termination and Testing – Intelligent Transportation System

## **WAGE DETERMINATION APPEALS PROCESS**

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
  - \* a survey underlying a wage determination
  - \* a Wage and Hour Division letter setting forth a position on a wage determination matter
  - \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response for this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determination  
Wage and Hour Division  
U. S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, D. C. 20210

- 2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (see 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U. S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requester considers relevant to the issue.

- 3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U. S. Department of Labor  
200 Constitution Avenue, N. W.  
Washington, D. C. 20210

- 4.) All decisions by the Administrative Review Board are final.

**WAGE SCALE ON ALL FEDERAL-AID PROJECTS - 11-1-2002**

The wage rates for this project were determined by the Secretary of Labor in accordance with Federal-Aid requirements.

<b>State of Ohio</b>	<b>Decision No. OH030002</b>
	<b>Decision Date 11/12/2004</b>

Contractors shall use only the classifications set forth herein on payrolls submitted to the District Office.

This contract requires the payment of the total of the basic hourly rates plus the fringe benefits payments for each classification in accordance with the following regulations which by reference are made part of this contract:

- 1) The U.S. Department of Labor Regulations, Title 29, Subtitle A, Part 5, Sections 5.5, 5.31, and 5.32, most recent revision at contract execution.
- 2) Form FHWA-1273 (most recent revision at contract execution) Part IV. Payment of Predetermined Minimum Wage and Part V. Statements and Payrolls.

The failure to pay prevailing wages to all laborers and mechanics employed on this project, shall be considered a breach of contract. Such a failure may result in the termination of the contract and debarment.

The Contractor and all subcontractors shall pay all wages and fringe benefits by company check. All payroll records and canceled pay checks shall be maintained for at least three years after the termination of the Contractor's responsibility as defined in section 109.12 (E) of the 2002 Construction and Material Specifications Manual. The Contractor's and all subcontractors' payroll records and canceled pay checks shall be made available for inspection by the Department and the U.S. Department of Labor, upon request, anytime during the life of the contract, and for three years thereafter by the U.S. Department of Labor. Additionally, the Contractor and all subcontractors shall permit such representatives to interview any employees during working hours while the employee is on the job.

The wage and fringe rates determined for this project shall be posted by the Contractor in a prominent and accessible place on the project, field office, or equipment yard where they can be easily read by the workers.

The Contractor and all subcontractors shall submit to the District Construction Office, certified payrolls each week beginning three weeks after the start of work. These payrolls shall be on a Form WH-347 or equivalent and shall show the following:

1. Employee name, address, social security number, classification, and hours worked.
2. The basic hourly and overtime rate paid, total pay, and the manner in which fringe benefit payments have been irrevocably made.
3. The project number and pay week dates.
4. Original signature of a company officer on the certification statement.

Additionally, a copy of the "Apprentice Certification" obtained from the USDOL, Bureau of Apprenticeship and Training, must accompany the first certified payroll submitted for all apprentices working on this project.

Please be aware that it is ultimately the responsibility of the Contractor to ensure that all laws relating to prevailing wages in the USDOL Regulations, Title 29, parts 1 and 5, are strictly adhered to by all subcontractors on the project.

If the Contractor or any subcontractor fails to comply with any of the provisions contained in this proposal note, the Department may terminate the contract, debarment the Contractor or Subcontractor and/or withhold or suspend pay estimates after written notice and a reasonable opportunity to comply has been provided.

The applicable wage and fringe rates for this project are provided in the wage rate section of this proposal.

**CERTIFICATION AGAINST DEBARMENT AND SUSPENSION**

The bidder hereby certifies, except as noted below, under penalty of perjury and under other such penalties as the laws of this state and the United States of America provide, that the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of federal funds is **not** currently under suspension, debarment, voluntary exclusion or determination of ineligibility by any federal agency; that the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of federal funds has **not** been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three (3) years; that the company or any person associated therewith in the capacity of owner, partner, director, manager, auditor, or any position involving the administration of federal funds does **not** have a proposed debarment pending; that the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator has **not** been indicted, convicted, or had a civil judgment rendered against the company, or themselves by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.

If there are exceptions to any of the above clauses please set out the exceptions on the lines below. Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate below to whom it applies, initiating agency and dates of action. Providing false information may result in criminal prosecution or administrative sanctions.

Execution of this proposal on the signature portion thereof shall constitute also signature of this certification as permitted by Title 28 United States Code, Section 1746.

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**LIMITATION ON USE OF CONTRACT FUNDS FOR LOBBYING**

1. The prospective bidder certifies, by signing and submitting this bid proposal, to the best of his or her knowledge and belief, that:



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

#### **NON - COLLUSION AFFIDAVIT**

In accordance with Title 23 United States Code, Section 112 and Ohio Revised Code, Chapter 1331 et. seq: and Sections 2921.11 and 2921.13, the bidder hereby states, under penalty of perjury and under other such penalties as the law provides, that he or his agents or employees have not entered either directly or indirectly into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal. Execution of this proposal on the signature portion thereof shall constitute also signature of this Non-Collusion Affidavit as permitted by title 28 United States Code, Section 1746.

#### **REPORTING BID RIGGING**

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

## **BAR CHART SCHEDULE (1/2/2002)**

### **I. General.**

The progress schedule required for this project is the simple bar chart type as described in Section II of this note. Prepare and submit a progress schedule to the DCE for review at or before the pre-construction conference. The Engineer will review the schedule and within 14 calendar days of receipt, will either accept the schedule or provide the Contractor with comments. Acceptance of the schedule does not revise the Contract Documents. Provide clarification or any needed additional information within 10 days of a written request by the Engineer. The Department will withhold Estimates until the Engineer accepts the schedule. The Engineer will not measure or pay for the preparation of the schedule and schedule updates directly, but the cost of preparing and updating the schedule is incidental to all Contract Items. The requirements of this note are in addition to progress schedule requirements in 108.02 of the Construction & Material Specifications.

### **II. Schedule Requirements.**

Include the following Administrative Identifier Information:

1. Project Number
2. County
3. Route Number
4. FHWA Number
5. PID Number
6. Contract Number
7. Date of Contract
8. Completion Date
9. Contractor's Name
10. Contractor's Dated Signature
11. ODOT's Dated Acceptance Signature

Provide a working day schedule that shows the various activities of Work in sufficient detail to demonstrate a reasonable and workable plan to complete the Project by the Completion Date. Show the order and the sequence for accomplishing the Work. Describe all activities in sufficient detail so that the Engineer can readily identify the Work and measure the progress of each activity. The bar chart schedule must reflect the scope of work, required phasing, maintenance of traffic requirements, interim completion dates, the Completion Date, and other project milestones established in the Contract Documents. Include activities for submittals, working and shop drawing preparation, submittal review time for the Department, material procurement and fabrication, and the delivery of materials, plant, and equipment, and other similar activities. The schedule must be detailed on letter or legal sized paper.

Activity requirements are discussed in further detail as follows:

1. Activity Description

Assign each activity an unambiguous descriptive word or phrase. For example, use "Excavate Area A," not "Start Excavation."

2. Activity Original Duration

Indicate a planned duration in calendar days for each activity. Do not exceed a duration of 20 working days for any activity unless approved by the Engineer. Do not represent the maintenance of traffic, erosion control, and other similar items as single activities extending to the Completion Date. Break these Contract Items into component activities in order to meet the duration requirements of this paragraph.

**III. Updated Progress Schedule.** Submit an updated progress schedule when ordered by the Engineer. The Engineer may request an updated progress schedule when progress on the work has fallen more than 14 calendar days behind the latest accepted progress schedule. Information in the updated schedule must include a "% work completed" value for each activity.

**IV. Recovery Schedule.** If the progress schedule projects a finish date for the Project more than 14 calendar days later than the Completion Date, submit a revised schedule showing a plan to finish by the Completion Date. The Department will withhold Estimates until the Engineer accepts the revised schedule. The Engineer will use the schedule to evaluate time extensions and associated costs requested by the Contractor.

#### **VALUE ENGINEERING CHANGE PROPOSAL - CONSTRUCTION COSTS (1-7-98)**

The Department will consider the Contractor's submission of a Value Engineering Change Proposal (VECP) which will reduce project costs. The purpose of this provision is to encourage the use of the ingenuity and expertise of the Contractor in arriving at alternate plans, specifications or other requirements of the contract. Any savings will be shared equally between the Contractor and the Department. The Contractor's costs for development, design and implementation of the VECP are not eligible for reimbursement. The VECP must not impair any of the essential functions and characteristics of the project such as service life, reliability, economy of operation, ease of maintenance, safety and necessary standardized features. The submission of the value engineering change proposal shall conform with the current Guidelines on Value Engineering Change Proposals adopted by the Director. Acceptance of a VECP is at the sole discretion of the Director.

#### **TEMPORARY SEDIMENT AND EROSION CONTROLS WITH PRICES – 4/17/04**

**General:**

Proposal Note 205 provides the unit prices to be used in conjunction with Supplemental Specifications 832 and 833.

Further, this proposal note explains Item 832 Each Erosion Control which is found in the quantity pages and defines Item 832 Storm Water Pollution Prevention Plan.

**Item 832 Each Erosion Control:**

The bidder will note that a fixed amount has been established by the Department for this item. The fixed amount is a Each that shall be included in the bidder's total bid amount for this project.

The fixed amount entered by the Department for this item is a estimate of the total cost of the Temporary Erosion Control Best Management Practices work required to be performed for this project.

**Item 832 Storm Water Pollution Prevention Plan:**

The bidder will note that this item must be bid by the bidder as a Each Item. The amount entered by the bidder must reflect the cost of this item, in addition to overhead and profit, to the bidder when performing this item. In the event that no Storm Water Pollution Prevention Plan is required, the bidder shall bid \$1.00 in order to avoid a blank bid. An entry of zero dollars is not acceptable to the Department. When a Storm Water Pollution Prevention Plan is found not to be required, the Department shall non-perform this item. This item is exempt from the non-performance table found in Section 104.02 of the Construction and Material Specifications Handbook.

The Department will make payment to the Contractor after the plan has been reviewed. Only one Storm Water Pollution Prevention Plan shall be submitted by the Contractor for each project awarded. All work required by this proposal note and the Supplemental Specifications 832 and 833 shall be contained in that plan. Revisions to the plan may be made by the successful Contractor. Those revisions made, but not caused by the Department, shall be the financial responsibility of the Contractor. Those revisions to the accepted Storm Water Pollution Prevention Plan caused by the Department will be paid by the Department as part of the revised work.

**Items to be Included in Total Bid Amount:**

Both, Item 832 Each Erosion Control and Item 832 Storm Water Pollution Prevention Plan shall be added to the bidder's total bid amount as any other bid items in order to produce a total project bid amount.

**Erosion Control Item Unit Prices:**

Listed below are the Erosion Control Item unit prices. The payment due for the properly installed Erosion Control Items will be calculated using these unit prices times the properly installed Erosion Control Item unit. Then these amounts will be deducted from the Each fixed amount provided by the Department in the bid proposal for Item 832 Each Erosion Control. When the temporary Sediment and Erosion Control Best Management Practices work exceeds the fixed amount provided by the Department, the remaining work required by this item still will be paid by the Department pursuant to the below listed unit prices. These prices are fixed for the duration of this project. Additionally, all Temporary Erosion Control Best Management Practices will be performed at these below listed unit prices.

**English Temporary Sediment and Erosion Control Prices**

Item	Unit	Description	Prices
832	Square Yard	Construction Seeding and Mulching	\$0.46
832	Foot	Slope Drains	\$7.00
832	Cubic Yard	Sediment Basins and Dams	\$2.80
832	Foot	Perimeter Filter Fabric Fence	\$1.70
832	Foot	Bale Filter Dike	\$4.50
832	Foot	Filter Fabric Ditch Check	\$4.00
832	Foot	Inlet Protection	\$8.00
832	Cubic Yard	Dikes	\$1.50
832	Square Yard	Construction Ditch Protection	\$1.10
832	Square Yard	Construction Slope Protection	\$1.00
832	Cubic Yard	Rock Channel Protection Type C or D with Filter	\$32.00
832	Cubic Yard	Rock Channel Protection Type C or D without Filter	\$30.00
832	Cubic Yard	Sediment Removal	\$2.80
832	Foot	Construction Fence	\$3.80

**Metric Temporary Sediment and Erosion Control Prices**

Item	Unit	Description	Prices
832	Square Meter	Construction Seeding and Mulching	\$0.46
832	Meter	Slope Drains	\$21.00
832	Cubic Meter	Sediment Basins and Dams	\$2.80
832	Meter	Perimeter Filter Fabric Fence	\$5.10
832	Meter	Bale Filter Dike	\$4.50
832	Meter	Filter Fabric Ditch Check	\$12.00
832	Meter	Inlet Protection	\$24.00
832	Cubic Meter	Dikes	\$1.50
832	Square Meter	Construction Ditch Protection	\$1.10
832	Square Meter	Construction Slope Protection	\$1.00
832	Cubic Meter	Rock Channel Protection Type C or D with Filter	\$32.00
832	Cubic Meter	Rock Channel Protection Type C or D without Filter	\$30.00
832	Cubic Meter	Sediment Removal	\$2.80
832	Meter	Construction Fence	\$11.40

**DESIGN REQUIREMENTS FOR PLANT MIX PAVEMENTS (MEDIUM) - 12/07/95**

On this project, all 301, 402, 403, 404, 412, 446 and 448 materials shall be designed for MEDIUM traffic volumes.

**HERBICIDAL PRODUCT DATA - 06/13/03**

The following information shall be submitted with your bid.

1. Herbicide Trade Name \_\_\_\_\_
2. Manufacturer \_\_\_\_\_
3. Rate of Dilution \_\_\_\_\_
4. Application Rate \_\_\_\_\_
5. Drift Control Agent \_\_\_\_\_
6. Product Labels \_\_\_\_\_
7. MSDS Sheets \_\_\_\_\_

If you don't provide this information with your bid, the above information must be provided to the Ohio Department of Transportation (ODOT), Office of Contracts no later than 5 calendar days after the sale date of this project. **Failure to furnish this information will result in the rejection of this bid.**

Additionally, if ODOT deems any of the above information insufficient and/or in violation of any controlling governmental regulation, the bidder shall have a period of 3 working days after notification by ODOT to submit new data without benefit of changing the bid price. If the contractor does not supply this information within 3 working days, its bid will be rejected.

## **PAINTING OF STRUCTURAL STEEL March 22, 2004**

**This proposal note replaces 2002 CMS 514 on all projects to be awarded in 2004. This proposal note places additional requirements on Contractors relative to training for the Superintendent and the Quality Control Specialist. Quality Control Point progressive photographic documentation and independent inspection requirements have also been incorporated into this document. General revisions have been made throughout for clarity and emphasis. The additional sections pertinent to the above additions are 514.02.1, 514.10.1, and 514.18.1.**

This proposal note significantly modifies past construction and inspection practices that both parties to the contract must take notice of and adhere to in contract performance.

### **ITEM 514 PAINTING OF STRUCTURAL STEEL**

- 514.01 Description**
- 514.02 Materials**
  - 514.02.1 Superintendent**
- 514.03 Quality Control**
- 514.04 Testing Equipment**
- 514.05 Work Limitations**
- 514.06 Protection of Persons and Property**
- 514.07 Pollution Control**
- 514.08 Safety Requirements and Precautions**
- 514.09 Inspection Access**
- 514.10 Job Site Visual Standards**
  - 514.10.1 Quality Control Point Photographic Verification and Documentation**
- 514.11 Surface Preparation**
- 514.12 Washing Shop Primer**
- 514.13 Handling**
- 514.14 Mixing and Thinning**
- 514.15 Coating Application**
- 514.16 Removing Fins, Tears, or Slivers**
- 514.17 Caulking**
- 514.18 Dry Film Thickness**
  - 514.18.1 Final Inspection**
- 514.19 Repair Procedures**
- 514.20 Method of Measurement**
- 514.21 Basis of Payment**

**514.01 Description.** This work consists of cleaning and painting all steel surfaces.

**514.02 Materials.** On existing steel, apply a three-coat paint system consisting of an organic zinc prime coat, an epoxy intermediate coat, and a urethane finish coat. The coating system shall conform to 708.01 and 708.02.

On new steel, apply a three-coat paint system consisting of an inorganic zinc prime coat, an epoxy intermediate coat, and a urethane finish coat. The prime coat shall conform to 708.01, and the intermediate and finish coats shall conform to 708.02. Supply the intermediate and finish coats from the same manufacturer. The Contractor may supply the prime coat from a manufacturer other than the manufacturer of the intermediate and finish coats.

For caulking, use a two-component, non-sag, non-shrink 100 percent solids epoxy capable of filling voids up to 1 inch (25 mm) wide.

**514.02.1 Superintendent.** In addition to the requirements of 105.06, the Superintendent must successfully complete a Bridge Painting pre-qualification course and training offered by the Department. The course must have been completed within the past four years and an individual course certificate must have been received by the Superintendent. Present certificate to the Engineer prior to commencing work. No work is permitted unless the Superintendent provides a valid course certificate.

**514.03 Quality Control.** Quality control consists of designating quality control specialists to control the quality of work in each phase established by Quality Control Points (QCPs). Control quality by inspection, tests, and cooperation with inspection and testing performed by the Engineer and inspector.

**A. Quality Control Specialist.** Identify the individuals dedicated to performing duties as the painting quality control specialists before starting work in the field. Provide a quality control specialist for each structure, but one quality control specialist must be provided for every three structures for which work is progressing concurrently.

Each quality control specialist must be formally trained or retrained by a NACE (National Association of Corrosion Engineers) certified coating inspector or a SSPC (The Society for Protective Coatings, SSPC) protective coating specialist. Provide a copy of the trainer's NACE or SSPC certification and a letter or certificate signed and dated by the trainer to the Office of Construction Administration. Retrain the quality control specialist every five years in accordance with the above requirements.

The quality control specialist must successfully complete a Bridge Painting pre-qualification course offered by the Department. The training course must have been completed within the past four years and an individual course certificate must have been received by the quality control specialist.

Select only a quality control specialist who is approved by the Department. The Office of Construction Administration will publish a list of approved Quality Control Specialists. Present all required certificates, letters of certification, and valid identification to the Engineer prior to commencing work.

The quality control specialist will be immediately removed from the work and disqualified from future work if any quality control failure occurs. A quality control failure is defined as any of the following:

1. The dry film thickness has been approved by the quality control specialist and it is later found that over 20 percent of the spot measurements of any one member of a structure, such as a cross frame, web, flange, stiffener, or other parts of the structure are either under the minimum or over the maximum spot thickness.
2. The dry film thickness has been approved by the quality control specialist and it is later found that the thicknesses of any area of a structure as described in 514.18 are either under the minimum or over the maximum specification thickness.
3. Two separate occurrences when the surface preparation has been approved by the quality control specialist of any one member type, such as the cross frames, webs, flanges, stiffeners, or other parts of the structure and it is later found that the surfaces of those members were either not properly profiled or not properly cleaned as required by the Contract Documents. Occurrences are determined per structure.

4. Two separate occurrences of the quality control specialist performing production duties not allowed by the Contract Documents. Occurrences are determined per structure.
5. Two separate occurrences when the quality control specialist fails to perform any one of the duties assigned to the quality control specialist in the Contract Documents. Occurrences are determined per structure.

Suspend work if the quality control specialist is not available or has been removed. The Engineer will immediately provide written notification to the Office of Construction Administration of any quality control failure identified above. Resume work when a quality control specialist, qualified and approved as provided in 514.03, is available.

For work in the fabrication shop, each fabricator shall identify one or more full-time individuals who shall perform the duties of the painting quality control specialist.

The quality control specialist may not be used to perform production duties including supervision, blasting, painting, waste disposal, mixing, operating or repairing equipment, or other tasks not associated with duties of the quality control specialist while the Contractor is performing work toward the completion of a Quality Control Point.

Ensure that each quality control specialist is trained and equipped with Material Safety Data Sheets (MSDS), product data sheets, tools, and equipment necessary to provide quality control on all aspects of the work. Each quality control specialist shall have a thorough understanding of the plans for the work, including any pertinent addenda, change order, or other contract documents, and these Specifications. Duties each quality control specialist shall perform include:

1. Inspect equipment and abrasive at specified intervals.
2. Approve the work and provide documentation that the work has been approved immediately before each QCP.
3. Inspect the work with the Engineer at each QCP.
4. Verify the Contractor or fabricator performed work according to the Contract Documents.
5. Cooperate with the inspection and testing performed by the Engineer and inspector.
6. Document test results and compare test results with the Engineer's and inspector's test results.
7. Notify Superintendent of nonconforming work.
8. Stop work when test equipment is not available and when necessary to ensure the work is performed according to the Contract.

The fabricator's quality control specialists shall provide the Engineer with a letter that includes specified information or check point data documenting acceptance of the work and consisting of the following:

1. Checks on the abrasive to ensure that it has not been contaminated with oil.
2. The profile of the blasted surface.
3. The air and steel temperature and dew point before blast cleaning and painting and at 4-hour intervals during the blasting and painting operation.
4. Readings of the actual dry film thickness.
5. The lot and stock number of the paint and the date of manufacture.
6. TE-24 for the coating used in the shop.
7. Documentation that the paint mixer is functioning properly, that each spray operator has demonstrated the ability to paint, and that all spray equipment is used as per the manufacturer's recommendation.



**B. Quality Control Points (QCP).** QCPs are points in time when one phase of the work is complete and approved by the quality control specialist and ready for inspection by the Engineer or the inspector before commencing the next phase of the work. At a QCP, the quality control specialist or fabricator shall provide quality control tests bearing their signature to the Engineer. The Contractor or fabricator shall provide the Engineer and inspectors access to inspect all affected surfaces. If inspection identifies a deficiency, correct the deficiency according to the Contract Documents before starting the next phase of work. Discovery of defective work or material after a Quality Control Point is past or failure of the final product before final acceptance, shall not, in any way, prevent the Department from rejecting the final product or obligate the Department to final acceptance. **Final acceptance will be determined as per 514.18.1, Final Inspection.**

	Quality Control Points	Purpose	New Steel	Existing Steel
1.	Solvent Cleaning	Remove asphalt cement, oil, grease, etc.	Yes	Yes
2.	Grinding Flange Edges	Remove sharp corners	Yes	Yes
3.	Abrasive Blasting	Blast surfaces to receive paint	Yes	Yes
4.	Containment/Waste Disposal	Contain, collect, & dispose of abrasive blasting debris	No	Yes
5.	Prime Coat Application	Check surface cleanliness, apply prime coat, check coating thickness	Yes	Yes
6.	Remove Fins, Tears, & Slivers	Remove surface defects and slivers	Yes	Yes
7.	Washing of Shop Primer	Remove all water soluble materials (salt, dirt, etc.)	Yes	No
8.	Intermediate Coat Application	Check surface cleanliness, apply intermediate coat, check coating thickness	Yes	Yes
9.	Caulking	Caulk areas not sealed by the intermediate coat	Yes	Yes
10.	Finish Coat Application	Check surface cleanliness, apply intermediate coat, check coating thickness	Yes	Yes
11.	Final Review	Acceptance and check total system thickness	Yes	Yes

**514.04 Testing Equipment.** For the project duration, provide the Engineer or inspectors with the test equipment listed below for the type of work at each work site with ongoing work. With the exception of the recording thermometer, the fabricator shall provide its quality control specialists with the test equipment listed below. The Contractor and fabricator shall maintain all testing equipment in good working order. When no test equipment is available, no work shall be performed.

A. Film and a camera with the following features:

1. Uses self developing color print film.
2. Lens with auto focus system.
3. Focuses from 2 feet (0.6 m) to infinity.
4. Built-in fill flash.

Or provide a digital camera with the following features:

1. 5.0 Megapixel or greater resolution.

2. Minimum 3X Optical zoom lens capability with automatic focus.
  3. Minimum 512M Memory capability.
  4. Built-in flash.
  5. Photograph printer with docking capability compatible with the camera including supplies necessary to print. (i.e. Ink Cartridges, Photograph quality paper, and other consumables required for operation and photograph printing.)
- B. One Spring micrometer and three rolls of extra-coarse replica tape.
- C. One Positector 2000 or 6000, Quanix 2200, or Elcometer A345FB11; and two sets of calibration plates. The first set shall be 1.5 to 8 mils (38 to 200  $\mu\text{m}$ ) and the second set shall be 10 to 25 mils (250 to 625  $\mu\text{m}$ ). Both sets shall be as per the NIST calibration standards according ASTM D 1186.
- D. One Sling Psychrometer including Psychometric tables.
- E. Two steel surface thermometers accurate within 2 °F (1 °C).
- F. Flashlight 2-D cell.
- G. SSPC Visual Standard for Abrasive Blast Cleaned Steel (SSPC-VIS 1-89).
- H. One recording thermometer capable of recording the date, time, and temperature over a period of at least 12 hours.

**514.05 Work Limitations.** Apply the prime coat to new structural steel inside permanent buildings at the fabricator's facility. If inside permanent buildings, the fabricator may perform year-round abrasive blasting and painting. Perform abrasive blasting and painting in the field from April 1 to October 31. The Department will not issue a time extension due to adverse weather during the month of April. The plans or other Contract Documents may require additional work limitations for specific bridges or projects.

**A. Temperature.** Except for inorganic zinc, apply paint when the steel, air, and paint temperature is 50 °F (10 °C) or higher and expected to remain higher than 50 °F (10 °C) for the cure times listed below. Apply inorganic zinc when the steel, air, and paint is 40 °F (4 °C) or higher. Cure inorganic zinc according to the minimum curing time and temperatures specified in the paint manufacture's printed instructions.

	50 °F (10 °C)	60 °F (16 °C)	70 °F (21 °C)
Primer (Organic Zinc)	4 hrs	3 hrs	2 hrs
Intermediate	6 hrs	5 hrs	4 hrs
Finish	8 hrs	6 hrs	4 hrs

Monitor the temperatures listed above for cure times using the recording thermometer.

The Contractor may use a heated enclosure or building. Supply heat continuously and uniformly to maintain the required minimum curing temperature within the enclosure or building until the coating has cured.

If combustion type heating units are used, vent the units away from the enclosure or building and do not allow exhaust fumes to enter the enclosure or building. Do not use open combustion in the enclosure or building.

The fabricator may use radiant heat when painting new structural steel inside permanent shop buildings. Locate radiant heaters at least 10 feet (3 m) above all surfaces to be painted. Vent exhaust fumes to prevent fumes from contacting surfaces to be painted.

**B. Moisture.** Do not apply paint:

1. If the steel surface temperature is less than 5 °F (3 °C) above the dew point.
2. If the steel surface is wet, damp, frosted, or ice-coated.
3. If the relative humidity is greater than 85 percent.
4. During periods of rain, fog, or mist unless the above moisture criteria is met.

If steel was abrasive blasted when the temperature of the steel was less than 5 °F (3 °C) above the dew point, reblast the steel when the steel temperature is at least 5 °F (3 °C) above the dew point.

**514.06 Protection of Persons and Property.** Collect, remove, and dispose of all rubbish, buckets, rags, or other discarded materials and leave the job site in a clean condition.

Except for deck bottoms and backwalls which have not been sealed or are not to have a sealer applied, protect all portions of the structure, that are not to be painted from damage or disfigurement by splashes, spatters, and smirches of paint.

If the Contractor causes any damage or injury to public or private property, the Contractor shall restore the property, to a condition similar or equal to the condition existing before the damage or injury.

**514.07 Pollution Control.** Take the necessary precautions to comply with pollution control laws, rules, or regulations of Federal, State, or local agencies and requirements of this specification.

**514.08 Safety Requirements and Precautions.** Comply with the applicable safety requirements of the Ohio Industrial Commission and OSHA.

Provide Material Safety Data Sheets (MSDS) at the preconstruction meeting for all paints, thinners, and abrasives used on this project. Do not begin work until submitting the MSDS to the Engineer.

**514.09 Inspection Access.** In addition to the requirements of 105.10, furnish, erect, and move scaffolding and other appropriate equipment to allow the inspector and the Engineer the opportunity to closely observe all affected surfaces during all phases of the work and for at least 10 workdays after completely painting each structure to allow for the Final Inspection as per 514.18.1. Maintain the in-place inspection access equipment employed during original painting activities or provide alternate inspection equipment such as platform lifts, bucket trucks, snooper trucks, or equivalent as approved by the Engineer. If scaffolding, or any hanger attached to the scaffolding, is supported by horizontal wire ropes, or if scaffolding is directly under the surface to be painted, comply with the following requirements:

- A. If scaffolding is suspended 43 inches (1092 mm) or more below the surface to be painted, place two guardrails on all sides of the scaffolding. Place one guardrail

at 42 inches (1067 mm) above the scaffolding and the other guardrail at 20 inches (508 mm) above the scaffolding.

- B. If scaffolding is suspended at least 21 inches (533 mm) but less than 43 inches (1092 mm) below the surface to be painted, place one guardrail on all sides of the scaffolding at 20 inches (508 mm) above the scaffolding.
- C. If 514.09.A and 514.09.B do not apply, place two guardrails on all sides of scaffolding. Place one guardrail at 42 inches (1067 mm) above the scaffolding and the other guardrail at 20 inches (508 mm) above scaffolding.
- D. Provide scaffolding at least 24 inches (610 mm) wide if guardrail is used and 28 inches (711 mm) wide if guardrail is not used and scaffolding is suspended less than 21 inches (533 mm) below the surface to be painted. If using two or more parallel scaffolding to achieve the proper width, rigidly attach the scaffolding together to prevent differential movement.
- E. Construct guardrail as a substantial barrier, securely fastened in place and free from protruding objects such as nails, screws, and bolts. Provide a properly located opening in the guardrail to allow the Engineer and inspector access onto the scaffolding.
- F. Construct guardrails and uprights of metal pipe, steel angles, or wood. If using pipe railing, provide pipe with a nominal diameter of at least 1 1/2 inches (38 mm). If using steel angle railing, provide 2 × 2 × 3/8-inch (50 × 50 × 9 mm) steel angles or other metal shapes of equal or greater strength. If using wood railing, provide 2 × 4-inch (50 × 100 mm) nominal stock. Space uprights no more than 8 feet (2.4 m) on center. If using wood uprights, provide 2 × 4-inch (50 × 100 mm) nominal stock.
- G. If the surface to be inspected is more than 15 feet (4.57 m) above the ground or water, and the scaffolding is supported from the structure being painted, provide a safety harness (not a safety belt) and lifeline for the Engineer and inspector. The lifeline shall not allow a fall greater than 6 feet (1.8 m). Provide a method to attach the lifeline to the structure that is independent of the scaffolding, cables, and brackets supporting the scaffolding.
- H. If scaffolding is more than 2.5 feet (762 mm) above the ground, provide an access ladder and equipment to attach the ladder onto the scaffolding capable of supporting 250 pounds (113 kg) with a safety factor of at least four. Uniformly space rungs, steps, cleats, and treads no more than 12 inches (305 mm) on center. Extend at least one side rail at least 36 inches (914 mm) above the landing near the top of the ladder.
- I. If the distance from the ladder to the access point on the scaffolding exceeds 12 inches (305 mm), provide an additional landing that is capable of supporting a minimum of 1000 pounds (454 kg) and at least 24 inches (610 mm) wide and 24 inches (610 mm) long. Size and shape the landing so that the distance from the landing to the point where the scaffolding is accessed does not exceed 12 inches (305 mm). Firmly attach the landing to the ladder; however, do not use the ladder to support the landing.
- J. In addition to the scaffolding requirements above, comply with all Federal, State, and local laws, ordinances, regulations, orders, and decrees.

- K. Furnish all necessary traffic control to allow inspection during and after all phases of the project.

**514.10 Job Site Visual Standards.** Before starting abrasive blasting, establish job site visual standards by preparing a test section, subsequent test sections, and by using photographs of approved test sections. Use job site visual standards and SSPC-VIS 1-89 standard for blasting. The Contractor or fabricator shall prepare an approximately 20 to 30-square foot (2 to 3 m<sup>2</sup>) test section from a representative area on the first structure to be painted. After the Engineer and the Contractor or fabricator agree the test area was blast cleaned to the requirements of the Contract Documents, photograph the test section and check the steel surface for the proper profile. After the Engineer approves the test section and the job site visual standards are documented by photographs and replica tape, the Contractor or fabricator may start abrasive blasting. The quality control specialists and Engineer or Inspector will use the job site visual standards (photographs), the Plan, Specification and requirements to determine acceptance of blast cleaning procedures. In all cases of dispute, the SSPC-VIS 1-89 standard shall govern. If the Contractor, Engineer, or fabricator believe the initial test section does not establish the proper visual standard for a different structure another test section on the different structure may be performed.

**514.10.1 Quality Control Point Photographic Verification and Documentation.** The Engineer will take a sufficient number of photographs to document the condition of the work at Quality Control Points 3, 4 and 11.

**514.11 Surface Preparation.**

**A. Solvent Cleaning (QCP #1).** Wash areas containing oil, grease, asphalt cement, diesel fuel deposits, or other petroleum products with a solvent (see SSPC-SP 1 for recommended practices). After cleaning with a solvent and before starting abrasive blasting, wash the areas with potable water as detailed below.

Use equipment capable of delivering the water at a nozzle pressure of at least 1000 pounds per square inch (7 MPa) and at a rate of not less than 4 gallons (15 L) per minute. The Contractor or fabricator shall provide the Engineer with equipment specifications that verify both the delivery pressure and rate. Provide gauges on the equipment to verify the pressure during operation. Hold the nozzle a maximum of 12 inches (300 mm) from the surface being washed.

**B. Grinding Flange Edges (QCP #2).** Before abrasive blasting, round all exposed bottom flange edges of longitudinal beams to a radius of  $1/8 \pm 1/16$  inch ( $3 \pm 1.5$  mm). This work has no weather and temperature restrictions.

**C. Abrasive Blasting (QCP #3).** Do not abrasive blast areas that contain asphalt cement, oil, grease, or diesel fuel deposits. Before abrasive blasting, completely remove all dirt, sand, bird nestings, bird droppings, and other debris from the scuppers, bulb angles, and pier and abutment seats.

Abrasive blast all steel to be painted according to SSPC-SP 10 and as shown on the pictorial surface preparation standards for painting steel surfaces shown in SSPC-VIS 1-89. Maintain steel in a blast cleaned condition until it has received a prime coat of paint.

The Contractor may commercial blast clean the back side of end cross frame assemblies that are 3 inches (75 mm) or closer to backwalls according to SSPC-SP 6.

Cover and protect galvanized and metalized steel (including corrugated steel bridge flooring), adjacent concrete already or specified to be coated or sealed, and other surfaces not intended to be painted, from damage caused by blasting and painting operations. Repair adjacent coatings damaged during the blasting operation. Backwalls and bottoms of decks not sealed nor specified to be sealed do not need to be covered and protected.

For field blasting, use a recyclable steel grit. For shop blasting, use an abrasive that produces an angular profile. All abrasives shall provide a profile from 1.5 to 3.5 mils (40 to 90 mm) as determined by replica tape according to ASTM D 4417, Method C. Clean the abrasive of paint, chips, rust, mill scale, and other foreign material after each use and before each reuse. Use equipment specifically designed for cleaning the abrasive.

Check each load of abrasives delivered to the job site or fabrication shop for oil contamination by adding a small sample of abrasives to tap water. Reject the abrasive if an oil film is detected on the water surface.

To ensure that the compressed air is not contaminated, the quality control specialists shall blow air from the nozzle for 30 seconds onto a white cloth or blotter held in a rigid frame. If the cloth or blotter retains oil or other contaminants, suspend abrasive blasting until retests verify the problem was corrected. Perform this test at the start of each shift and at 4-hour intervals.

The Contractor may simultaneously abrasive blast and paint the same bridge provided the abrasive blasting debris and dust does not contact freshly painted surfaces and does not contaminate paint during the curing period. For shop blasting, the fabricator may simultaneously abrasive blast and paint if the two operations are separated by distance or containment that prevents paint contamination.

For surface preparation of new structural steel in the fabricator's shop, the quality control specialist shall take replica tape readings as follows:

1. For an automated blasting process, test the greater of 20 percent of the main members or one member per shift. These tests shall consist of taking five random readings per member.
2. For a manual blasting process, test each main member. The test of a main member consists of taking five readings at random locations.
3. For both an automated and manual blasting process, test 15 percent of all secondary members. The test of a secondary member consists of taking one random reading.

Remove abrasives and residue from all surfaces to be painted. Keep all structural steel that was blast cleaned in the field or the fabricator's shop dust free. Apply a prime coat to steel that was blast cleaned in the field within 12 hours of the beginning of the abrasive blasting operation. Apply a prime coat to structural steel that was blast cleaned in the fabricator's shop within 24 hours of the beginning of the abrasive blasting operation. If a prime coat is not applied within the times stated above, reblast the steel before applying the prime coat. Remove all dust or abrasives from adjacent work and from the finish coat.

Provide the Engineer and Inspector with field wash facilities and adequate supply of running potable water, soap, and towels for washing face and hands during the surface preparation operation. Properly contain, test, and dispose of the wastewater. Locate a wash facility at each bridge site and in an area that will not be contaminated by the blasting debris.

**D. Containment/Waste Disposal (QCP #4).** Waste material generated by abrasive blasting operations in the field is a solid waste and may be a hazardous waste. Contain, collect, store, evaluate, and properly dispose of the waste material. Comply with all Federal, State, and local environmental protection laws, regulations, and ordinances including, but not limited to, air quality, waste containment, and waste removal. The Contractor is advised that various governmental bodies are involved with solid waste and hazardous waste disposal and the Contractor is responsible for complying with laws enforced by the various governmental bodies.

To prevent contamination of the pavement or soil, park all equipment on ground covers free of cuts, tears, and holes.

Clean equipment of spent abrasives or debris before bringing equipment to the project, moving equipment from one bridge site to another, and removing equipment from the project. Store debris cleaned from equipment with the debris from the structure that generated the debris.

Erect an enclosure to completely surround (around, under and over the top on truss type bridges) the blasting operations. The Contractor may use the ground as the bottom of the enclosure if the ground is completely covered with plastic or tarps.

Construct the enclosure of flexible materials such as tarpaulins or containment screens (specifically designed for blasting containments), or construct the enclosure of rigid materials such as plywood. Maintain all materials free of tears, cuts, and holes. Overlap all seams a minimum of 6 inches (150 mm) and fasten the seams together at 12-inch (300 mm) centers or in a manner that ensures a seal that does not allow openings between the screens in the containment. Extend the vertical sides of the enclosure completely up to the bottom of the deck on a steel beam bridge and use bulkheads between beams to enclose the blasting area.

The Contractor may use vacuum blasting instead of constructing containment if the vacuum blasting equipment is manufactured and marketed for use without containment and has controls that automatically shut down the blasting operation when the blast head brushes do not contact the surface being cleaned.

Collect all debris from blasting operations, equipment, or filters, and all debris that fell to the ground. Store the debris in steel containers with lids that are locked at the end of each workday. The storage location shall be at the bridge site unless, the Engineer and Contractor agree on an alternate storage location. Test and evaluate the debris for disposal. The location of centralized cleaning stations for recyclable steel shall also be agreed by the Engineer and the Contractor.

Obtain the services of a testing laboratory to obtain directly from the project site and evaluate a composite representative sample of the abrasive blasting debris for each bridge site. The person taking the sample must be an employee of the testing laboratory.

Take composite sample in the presence of the Engineer, comply with the requirements of U.S. EPA Publication SW 846 and take individual samples from all containers that are on the site at the time of the sampling. Blend individual samples of equal size together to comprise one composite sample. Take one individual sample from each drum and four randomly spaced individual samples from each container other than drums.

Take individual samples with stainless steel tools and place into clean glass or plastic containers.

Prepare a chain of custody record (Chain of Custody) for all composite samples. The Chain of Custody must include the name of the person taking the sample, the name of the testing laboratory for which the person works, the date and time the sample was taken, the bridge

sampled, the Township and Municipality where the bridge is located, and the signatures and dates of all persons in possession of the sample in the Chain of Custody.

Sample the abrasive blasting debris within the first week of production blasting at each bridge. Cease all blasting and painting operations on the bridge from which waste was generated, if sampling is not performed within the first week of production blasting.

Test composite samples for lead and chromium according to the U.S. EPA Publication SW 846. Provide the Chain of Custody and test results to the Director immediately after the test results are available. If the blasting debris is hazardous, as defined below, provide the Director with the names of the hauler and treatment facility. Perform all sampling and testing required by the hauler, treatment facility, or disposal facility.

The existing paint removed from bridges may contain lead or chromium. The Contractor is responsible for taking the proper safety precautions to ensure workers in this environment are properly protected (see bid proposal note, entitled "Safety").

**1. Hazardous Waste.** The blasting debris is hazardous if the concentration of either lead or chromium exceeds 5.0 mg/L. Label all the containers of hazardous blasting debris "HAZARDOUS". Secure the storage location by surrounding the site with a 5-foot (1.5 m) high chain link fence fabric supported by traffic sign drive posts 10 feet (3 m) apart. Drive the traffic signposts into the ground at least 2 feet (0.6 m) deep. Secure the fencing with padlocks at the end of each day. Post hazardous waste warning signs at obvious locations on the fenced enclosure.

The Director will obtain a generator number assigned to the State. After the Director obtains the generator number, arrange for the hauling, treating, and disposing of the hazardous waste. Use a firm licensed by EPA to haul and dispose of the hazardous waste. This firm is also responsible for providing for providing the Uniform Hazardous Waste Manifest (EPA Form 8700-22A)

In every case, properly dispose of all hazardous waste within 60 days after it is generated.

If hazardous waste is not properly disposed of within 60 days, the Department will consider the Contractor in breach of its Contract and the Department will take the following actions:

- a. Immediately suspend all abrasive blasting and painting of structural steel on the Project until hazardous waste is properly disposed.
- b. Cease processing all pay estimates.
- c. Forward a breach of contract notification to the Contractor's Surety.

The Contractor is responsible for fines or liens assessed by any governmental agency that has jurisdiction over the disposal of this hazardous waste material.

Decontaminate or dispose of all collection and containment equipment according to EPA guidelines.



**2. Non-Hazardous Solid Waste.** Haul and dispose of the waste that the Office of Construction Administration determines to be non-hazardous to a facility licensed to accept non-hazardous solid waste. Before disposing of any material, provide the Engineer with documentation that the disposal facility is licensed by the EPA to accept non-hazardous solid waste. Obtain from the disposal facility and provide the Engineer with a receipt that documents disposal of waste material at the approved landfill.

**514.12 Washing Shop Primer (QCP #7).** Wash shop primed structural steel after it is erected and the concrete deck is placed and within 30 days of applying the intermediate coat.

Wash the steel with potable water. Use equipment capable of delivering the water at a nozzle pressure of at least 1000 pounds per square inch (7 MPa) and at a rate of not less than 4 gallons (15 L) per minute. The Contractor shall provide the Engineer with equipment specifications that verify both the delivery pressure and rate. Provide gauges on the equipment to verify the pressure during operation. Hold the nozzle a maximum of 12 inches (300 mm) from the surface being washed. The surface is clean when clear rinse water runs off the structure. After rinsing the surface, inspect for remaining dirt and rewash dirty areas until clean.

**514.13 Handling.** Deliver all paint and thinner in original unopened containers with labels intact. The Engineer will accept containers with minor damage provided the container is not punctured. Thinner containers shall be a maximum of 5 gallons (19 L). Before use, provide the Engineer with shipping invoices for all painting materials used on the Project.

Supply containers of paint and thinner with labels clearly marked by the manufacturer to show paint identification, component, color, lot number, stock number, date of manufacture, and information and warnings as may be required by Federal and State laws.

Store paint at the temperature recommended by the manufacturer and in a storage facility that prevents theft. Provide thermometers capable of monitoring the maximum high and low temperatures inside the storage facility.

Before opening paint or thinner containers, check the labels to ensure the proper container is opened and the paint has not been stored beyond its shelf life. Do not use paint that exceeded its shelf life. Do not open containers of paint and thinner until required for use and then open the oldest paint of each kind first. Solvent used for cleaning equipment is exempt from the above requirements.

Do not use paint that has livered, gelled, or otherwise deteriorated during storage. The Contractor may use thixotropic materials that can be stirred to the normal consistency. Properly dispose of unused paint and paint containers.

**514.14 Mixing and Thinning.** Thoroughly mix all ingredients immediately before use with a high shear mixer (such as a Jiffy Mixer). Do not mix paint using paddle mixers, paint shakers, or an air stream bubbling under the paint surface. After mixing, carefully examine the paint for uniformity and to ensure that no unmixed pigments remain on the bottom of the container. Before use, strain the paint through strainers that remove skins or undesirable matter but not pigment.

Except for primer, mix paint as necessary during application to maintain a uniform composition. Continuously mix primer using an automated agitation system. Do not use hand-held mixers for primer paints.

Do not add thinner to the paint without the Engineer's approval, and only add thinner if necessary for proper application as recommended by the manufacturer's printed instructions. In the

Engineer's presence, slowly add the amount of thinner recommended and supplied by the manufacturer to the paint during the mixing process. Do not mix other additives into the paint.

Add catalysts, curing agents, or hardeners that are in separate packages to the base paint only after thoroughly mixing the base paint. With constant agitation, slowly pour the proper volume of catalyst into the required volume of base. Do not pour off liquid that has separated from the pigment before mixing. Use the mixture within the pot life specified by the manufacturer and dispose of unused portions at the end of each workday.

#### **514.15 Coating Application.**

**A. General.** Paint all structural steel, scuppers, expansion joints except top surface, steel railing, exposed steel piling, drain troughs, and other areas as shown on the plans. Paint galvanized or metalized surfaces if shown on the plans. Unless otherwise shown on the plans or specified below, apply paint by brush, spray, or a combination of brush and spray methods. If brush and spray are not practical to paint places of difficult access, the Contractor may use daubers, small diameter rollers, or sheepskins.

Use daubers, small diameter rollers, or sheepskins to paint the following areas:

1. Where cross-frame angles are located within 2 inches (50 mm) of the bottom flange.
2. Where end cross frames are within 6 inches (150 mm) of the backwall.
3. Where there is less than 6 inches (150 mm) between the bottom of bottom flange and the beam seat.

**B. Application Approval.** The Engineer may inspect the initial application of the prime, intermediate, and final coats. If the Engineer discovers defects, adjust the method of application to eliminate the defects then continue applying the coat.

**C. Additional Information Pertaining to Shop Applied Primer.** Apply a prime coat to all structural steel surfaces including insides of holes, behind stiffener clips and contact surfaces of connection, and splice material that is to be fastened with bolts in the shop or field. Apply a mist coating from 0.5 to 1.5 mils (12.5 to 37.5  $\mu\text{m}$ ) on surfaces that are to be imbedded in concrete and on surfaces within 2 inches (50 mm) of field welds other than those attaching intermediate or end cross frames to beams or girders. Apply one coat of primer to pins, pin holes, and contact surfaces of bearing assemblies, except do not paint those containing self-lubricating bronze inserts. Once the prime coat is dry, apply erection marks, using a thinned paint of a type and color that is completely concealed by and compatible with the second coat.

Do not handle or remove structural steel coated with inorganic zinc primers from the shop until the paint has cured as specified by the paint manufacturer's printed instructions.

Reduce the thickness of thick films of inorganic zinc primer by screening, sanding, or sweep blasting. If the primer paint cured longer than 24 hours, apply a re-coating of primer paint according to the paint manufacturer's printed instructions. If "mud cracking" occurs, abrasive blast and re-apply the primer to the affected area. If "checking" occurs, abrasive blast and reapply the primer or remove the "checking" by screening and evaluate the area by adhesion testing.

**D. Surface Cleanliness.** All surfaces to be painted shall be free of dust, dirt, grease, oil, moisture, overspray, and other contaminants. If the surface is degraded or contaminated, restore the surface before applying paint. In order to prevent or minimize degradation or contamination of cleaned surface in the field, the prime coat of paint shall be applied within 12 hours of the beginning of the abrasive blasting operation as required in surface preparation above, for steel which is cleaned and painted in the shop, the prime coat of paint shall be applied within 24 hours of the beginning of the blasting operation.

Schedule cleaning and painting when dust or other contaminants will not fall on wet, newly painted surfaces. Protect surfaces that do not receive paint or have already been painted from the effects of cleaning and painting operations. Before applying the next coat, remove overspray and pigeon droppings with a stiff bristle brush, wire screen, or a water wash with sufficient pressure to remove overspray and pigeon droppings without damaging the paint. Before applying the next coat, remove all abrasives and residue from painted surfaces with a vacuum system equipped with a brush type cleaning tool.

Remove all visible abrasives on the finish coat that came from adjacent work.

**E. Brush Application.** Apply the paint to produce a smooth coat. Work the paint into all crevices, corners, and around all bolt and rivet heads. Apply additional paint as necessary to produce the required coating thickness.

**F. Spray Application (General).** Apply paint using spray application as follows:

Keep spray equipment clean so that dirt, dried paint, solvents, and other foreign materials are not deposited in the paint film. Remove solvent left in the equipment before using the equipment.

Apply paint in a uniform layer with overlapping at the edges of the spray pattern. Paint the border of the spray pattern first, followed by painting the interior of the spray pattern. Complete painting a spray pattern before moving to the next spray pattern area. Within a spray pattern area, hold the gun perpendicular to the surface and at a distance that will ensure a wet layer of paint is deposited on the surface. Release the trigger of the gun at the end of each stroke. To ensure coverage, spray all bolts and rivet heads from at least two directions or apply the paint to bolts and rivet heads using a brush.

Each spray operator shall demonstrate to the Engineer or inspector the ability to apply the paint as specified before the operator sprays paint.

If mud cracking occurs, the affected area shall be cleaned to bare metal in accordance with surface preparation above and repainted. Fill all gaps and crevices 1/8 inch (3 mm) or less with primer.

Use spray equipment recommended by the paint manufacturer and suitable for use with the specified paint. Provide adequately sized traps or separators to remove oil and condensed water from the air. Periodically drain the traps during operations. To ensure that the traps or separators are working properly, test by blowing air from the spray gun for 30 seconds onto a white cloth or blotter held in a rigid frame. The Engineer or Inspector will verify the test results by inspecting the white cloth or blotter. If the cloth or blotter retains oil, water, or other contaminants, suspend painting until retests verify the problem was corrected. Perform this test at the start of each shift and at 4-hour intervals. This is not required for an airless sprayer.

Do not use spray application unless the operation is totally enclosed as required for abrasive blasting, to prevent overspray damage to the ground, public and private property, vegetation, streams, lakes, and other surfaces not to be painted.

**G. Prime, Intermediate, and Finish Coat Application (QCP #5, #8, and #10).** Apply paint as a continuous film of uniform thickness, free of all defects such as holidays, drips, runs, and sags. Repaint all thin spots or areas missed before the next coat of paint is applied.

Ensure that each coat of paint is properly cured before applying the next coat. Comply with the manufacturer's written instructions for the time interval between coats and apply the next coat when an additional coat will not cause detrimental film irregularities, such as lifting, wrinkling, or loss of adhesion of the undercoat. Do not exceed the following time intervals. If the prime coat is organic zinc, the maximum time between the prime and intermediate coats is 30 days. There is no maximum time between the prime and intermediate coats for an inorganic zinc primer. The maximum time interval between intermediate and finish coats is 13 days. These maximum recoat times include adverse weather days and the Engineer will not extend the times. If the next coating is not applied within the times stated above, remove the coatings and re-blast the steel according to SSPC-SP 10.

Stencil the Completion Date (month and year) of the finish coat and the letters of the applied paint system on the steel in 4-inch (100 mm) letters with black urethane paint. The appropriate letters for the paint systems are as follows:

<b>System Comprised of:</b>	<b>Letters</b>
Inorganic zinc prime coat, epoxy intermediate coat, and urethane finish coat	IZEU
Organic zinc prime coat, epoxy intermediate coat, and urethane finish coat	OZEU

Apply the date and paint system at four locations near the end of each outside beam on the outside web visible from the road or as directed by the Engineer.

**514.16 Removing Fins, Tears, or Slivers (QCP #6).** Use a grinder to remove all fins, tears, slivers, or any other burred or sharp edges that become evident after applying the prime coat. Retexture ground surfaces to produce a profile from 1.5 to 3.5 mils (40 to 90  $\mu\text{m}$ ) and reprime ground surfaces before applying the intermediate coat. The Contractor may begin removing fins, tears, and slivers after blasting and before priming.

Temperature and weather restrictions do not apply to removing fins, tears, and slivers, but the restrictions do apply to applying the prime coat.

**514.17 Caulking (QCP #9).** After the intermediate coat cures and before applying the finish coat, caulk gaps or crevices greater than 1/8 inch (3 mm).

**514.18 Dry Film Thickness (QCP #5, #8, and #10).** Determine prime coat thickness; prime and intermediate coat thickness; and prime, intermediate, and finish coat thickness using a Type 2 magnetic gage as follows:

Measure paint thickness at separate, evenly spaced, spot measurement locations over each 100-square feet (9 m<sup>2</sup>) of area. Locate five spot measurements on each of the following locations: top

flanges; bottom flanges; webs; cross bracing; stiffeners; etc. At each spot location, take three gage readings of either the substrate or the paint. Move the probe 1 to 3 inches (25 to 75 mm) for each new gage reading. Discard an unusually high or low gage reading that is not consistently repeated. The spot thickness measurement is the average of the three gage readings.

The average of five spot measurements for each location in the 100-square foot (9 m<sup>2</sup>) area shall not be less than the specified thickness. No single spot measurement area shall be less than 80 percent of the specified minimum thickness nor greater than 150 percent of the maximum specified thickness when organic zinc is applied and 120 percent of the maximum specified thickness when inorganic zinc is applied. Any one of three readings which are averaged to produce each spot measurement, may under run or overrun by a greater amount. Take five spot measurements per location for each 100-square foot (9 m<sup>2</sup>) area as follows:

- A. For all shop primed steel regardless of size, measure each 100-square foot (9 m<sup>2</sup>) area.
- B. For structures not exceeding 300 square feet (27 m<sup>2</sup>) in area, measure each 100-square foot (9 m<sup>2</sup>) area.
- C. For structures not exceeding 1000 square feet (90 m<sup>2</sup>) in area, randomly select and then measure three 100-square foot (9 m<sup>2</sup>) areas.
- D. For structures exceeding 1000 square feet (90 m<sup>2</sup>) in area, measure the first 1000 square feet (90 m<sup>2</sup>) as stated in section 2 and for each additional 1000 square feet (90 m<sup>2</sup>), or increment thereof, randomly select and then measure one 100-square foot (9 m<sup>2</sup>) area.
- E. If the dry film thickness for any 100-square foot (9 m<sup>2</sup>) area (sections 2 and 3) is not in compliance with the requirements of this subsection, then measure each 100-square foot (9 m<sup>2</sup>) area.
- F. Measure other areas or revise the number of spot measurements as shown on the plans.

Each coat of paint shall have the following thickness measured above the peaks:

	<b>Min. Spec. Thickness</b>	<b>Max. Spec. Thickness</b>	<b>Min. Spot Thickness</b>	<b>Max. Spot Thickness (Inorganic Zn)</b>	<b>Max. Spot Thickness (Organic Zn)</b>
Prime	3.0 mils (75 μm)	5.0 mils (125 μm)	2.4 mils (60 μm)	6.0 mils (150 μm)	7.5 mils (188 μm)
Intermediate	5.0 mils (125 μm)	7.0 mils (175 μm)	4.0 mils (100 μm)	10.5 mils (263 μm)	10.5 mils (263 μm)
Subtotal	8.0 mils (200 μm)	12.0 mils (300 μm)	6.4 mils (160 μm)	16.5 mils (413 μm)	18.0 mils (450 μm)
Finish	2.0 mils (50 μm)	4.0 mils (100 μm)	1.6 mils (40 μm)	6.0 mils (150 μm)	6.0 mils (150 μm)
Total	10.0 mils (250 μm)	16.0 mils (400 μm)	8.0 mils (200 μm)	22.5 mils (563 μm)	24.0 mils (600 μm)

Remove paint with a film thickness greater than the maximum specified thickness unless:

- A. The paint does not exhibit defects such as runs, sags, bubbles, or mud cracking, etc.

- B. The manufacturer provides a written statement to the Engineer that the excessive thickness is not detrimental.

For any spot or average of five spots at any location of a 100-square foot (9 m<sup>2</sup>) area that exceeds the maximum spot thickness, either remove and replace the coating according to 514.19 or prove to the Office of Construction Administration that the excess thickness will not be detrimental to the coating system. In order to prove to the Office of Construction Administration that the excess thickness will not be detrimental to the coating system, the Contractor must provide the Office of Construction Administration with the following information.

Certified test data proving that the excessive thickness will adequately bond to the steel when subjected to thermal expansion and contraction. The thermal expansion and contraction test shall take place over five cycles of a temperature ranges from -20 to 120 °F (-49 to 49 °C). After the thermal contraction and expansion cycles have taken place, the tested system shall be subjected to pull off tests and the results compared to the results of pull off tests that have been performed on a paint system with the proper thicknesses. In addition to the certified test results, the Contractor shall provide the Office of Construction Administration a written statement from the paint manufacturer stating that the excessive thickness is not detrimental.

If the Office of Construction Administration does not approve the excessive coating thicknesses or the Contractor elects not to provide the required written statement from the paint manufacturer and the certified test results when required, the Contractor shall remove and replace the coating. The removal and replacement of the coating shall be done as specified in 514.19.

#### **514.18.1 Final Inspection.**

- A. The Engineer will select locations for coating removal for inspection of surface preparation and dry film thickness. For all structures in which the supporting members are rolled beams or girders, remove a minimum of one location per 150 linear feet (46 m) of beam line for webs and flanges and 5% of all cross frame assemblies and other secondary structural members shall be selected for destructive testing. For all other bridge types with structural steel, remove one location for every 1,200 square feet (108 m<sup>2</sup>) of steel surface for destructive testing.
- B. At the selected areas, the Engineer will perform total dry film thickness testing using a type 2 magnetic gage. If the dry film thickness for that spot does not meet the requirements of 514.18, additional measurements will be taken to determine the extent of the deficient coatings.
- C. At the selected areas, remove at least 9 square inches (58 cm<sup>2</sup>) of the new coatings by methods that will not damage the surface of the steel. Approved removal methods are scraping, sanding, or the use of solvents. Do not use power tools. Perform removal while in the presence of the Engineer. The Engineer will document and photograph the selected areas after removal of the new coatings. If work is found not to be in conformance with the specifications and pertinent contract documents, additional locations may be selected for testing.
- D. Make minor repairs of areas where the coating was removed and other areas that were determined to be deficient. Make repairs as per 514.19. If the final inspection reveals greater than 15% of the areas inspected not in complete conformance with the specifications and pertinent contract documents, the Department will require that surface preparation and painting of the structural steel be completely redone to meet the requirements of the Contract Documents at no additional cost to the Department.

- E. Final Acceptance shall be based upon the results of the surface preparation observations and dry film thickness measurements obtained from the final inspection. Final Acceptance will also take into consideration acceptable progressive project documentation and progressive field measurements in determining the final acceptability of the Bridge Paint System.

Inspection access to the test locations to perform the required final inspection measurements shall conform to the requirements of 514.09.

**514.19 Repair Procedures.** Remove paint and correct defects or damaged areas, including areas damaged by welding, and in areas that do not comply with the requirements of this specification. Correct defects and damaged areas using the same paint as originally applied except the Engineer may approve using organic zinc to repair inorganic zinc in the field. Retexture the steel to a near white condition and a profile between 1.5 to 3.5 mils (40 to 90  $\mu$ m). Measure the profile immediately before applying the prime coat to ensure the profile is not destroyed during the feathering procedure. See 514.11C.

Feather the existing paint to expose a minimum of 1/2 inch (13 mm) of each coat.

During the reapplication of the paint, apply paint as follows:

- A. Apply the prime coat only to the surface of the bare steel and the existing prime coat exposed by feathering. Do not apply the prime coat to the adjacent intermediate coat.
- B. Apply the intermediate coat only to the new prime coat and the existing intermediate coat exposed by feathering. Do not apply the intermediate coat to the adjacent finish coat.
- C. Apply the finish coat only to the new intermediate coat and the existing finish coat that was feathered or lightly sanded. Do not apply the finish coat beyond areas that were feathered or lightly sanded.

At the perimeter of the repair area, apply the prime and intermediate coats using a brush. Apply the finish coat using either brush or spray.

The Contractor may need to several applications to obtain the proper thickness for each coat.

During the application of the prime coat, the paint shall be continuously mixed.

Perform all surface preparation and painting according to this specification. Instead of abrasive blasting, the Engineer may allow alternate methods of preparing the surface.

Blend repair areas with the adjacent coating and provide a finished surface in the patched areas that is smooth and has an even profile with the adjacent surface.

Submit, in writing, the method of correcting areas with runs to the Office of Construction Administration for approval.

**514.20 Method of Measurement.** The Department will measure Surface Preparation of Existing Structural Steel and Field Painting of Existing Structural Steel Prime Coat by the number of square feet (square meters) of structural steel painted or on a lump sum basis. The Department will measure Field Painting Structural Steel, Intermediate Coat and Field Painting Structural Steel, Finish Coat by the number of square feet (square meters) or pounds (kilograms) of structural steel painted, or on a lump sum basis.

The Department will determine the number of pounds (kilograms) of new structural steel painted by the accepted pay weight of the new structural steel.

For steel beam and steel girder bridges, the Department will determine the surface area by taking a nominal measurement of the beams (i.e., two times the beam depth plus three times the flange width). In addition to this nominal measurement, the Department will add a percentage to account for incidentals such as cross frames, bearing assemblies, stiffeners, expansion joints, scuppers, etc. It is not necessary for the Engineer or Inspector to field measure every detail of the bridge to verify quantities. If there is a quantity dispute, exact field measurements of all painted surfaces and calculations will govern over the above percentage to account for incidentals.

For extremely complex bridges, such as trusses, the Department will pay for painting on a lump sum basis.

The Department will measure grinding fins, tears, slivers on existing structural steel by the number of man hours expended by the workers actually doing the grinding and will include the time when the workers are performing grinding and repairing prime coat and not limited to only the actual grinding duration (i.e., the Department will include all hours of the workers when assigned to grinding regardless of actual grinding time). The Department will not measure grinding fins, tears, and slivers on new steel but will consider it incidental to unit price for the new steel.

**514.21 Basis of Payment.** The Department will pay for accepted quantities at the Contract prices as follows:

The Department may consider paint as eligible for payment for material on-hand as specified in 109.10, however, only paint that the Contractor can prove to the Engineer will be used during the construction season is eligible for payment. The Contractor shall provide the Engineer calculations indicating the total square feet (square meter) of steel to be painted during the construction season. The Contractor shall also provide calculations showing the total number of gallons (liters) required.

If the Contractor causes damage or injury public or private property, the Department will not pay for restoring the property to its original condition.

The Department will not pay for repairing adjacent coatings damaged during the blasting operation.

The Department will not pay for removing and replacing an area of coating because a spot or maximum average thickness exceeds the maximum spot thickness.

The Department will not pay for additional testing required by any hauler, treatment facility, disposal facility or landfill.

The Department will pay for caulking under Field Painting Structural Steel, Intermediate Coat.



The Department will pay for final inspection access, test area preparation and test area repair at each selected area under Final Inspection Repair. The Department will not pay for accessing, inspecting, and repairing areas that are not found to be in conformance with the specifications and pertinent contract documents.

Item	Unit	Description
514	Square Foot (Square Meter) Lump Sum	Surface Preparation of Existing Structural Steel
514	Square Foot (Square Meter) Lump Sum	Field Painting of Existing Structural Steel, Prime Coat
514	Square Foot (Square Meter) Lump Sum Pound (Kilogram)	Field Painting Structural Steel, Intermediate Coat
514	Square Foot (Square Meter) Lump Sum Pound (Kilogram)	Field Painting Structural Steel, Finish Coat
514	Man Hour	Grinding Fins, Tears, Slivers on Existing Structural Steel
514	Each	Final Inspection Repair

## UTILITY NOTE

Summit County - Interstate Route 77 - Section 8.86

**PID # 18702**

Project No. 050056

Bidders are advised that the following utility facilities will not be cleared from the construction area at the time of award of the contract. These utility facilities shall remain in place or be relocated within the construction limits of the project as set out below.

All station locations listed below are approximate unless otherwise stated.

Relocations are based on the *Construction Centerline*.

All changes to relocation work as described in the Utility Note must be approved by the ODOT Project Engineer and the District Utilities Coordinator. ODOT will not be held responsible for delay claims resulting from changes made to relocation work by the utility companies and/or the State's Highway Contractor without ODOT's prior consent.

Company work time frames **DO NOT** include Ohio Revised Code 48 hour One Call requirements.

### ***Ohio Edison***

The Company has aerial facilities crossing Swartz Road on both the east and west ends the project area and a line running parallel to the north side of the Swartz Road bridge over Interstate Route 77 which are in close proximity to the bridge. The overhead conductors within this project area will remain energized for the duration of the project. Caution should be exercised when working in the vicinity of these lines.

### ***Dominion East Ohio***

The Company has a 4" gas line attached to the underside of the Swartz Road bridge over Interstate Route 77. The Company will cut and cap this line temporarily, during the months of April through October. After the old line is removed and the structure is raised, the Company will install a new 4" gas line on the bridge. The Company shall take no more than **5 working days** to complete this work. The Company does not anticipate any other conflicts than the ones mentioned. If a conflict should arise, the State's Highway Contractor will immediately contact the Company so the proper actions can be taken to prevent delay of construction.

**CAUTION should be exercised when working in the vicinity of any gas lines within this project.**

### ***Summit County Department of Environmental Services***

The County has sewer lines in various locations which are potentially in conflict with proposed guardrail runs. The State's Highway Contractor shall exercise care when installing guardrail to prevent damage to the manholes and sewer lines.

***City of Akron***

The City has a water line north of the Swartz Road bridge over IR 77 and lying under IR 77. Proposed guardrail runs will be in potential conflict with water facilities at various sites. Extra care should be taken when installing guardrail in these locations.

October 1, 2004

Page 2 of 2

**Project Number: 050056**

To the Director of the Ohio Department of Transportation: The undersigned, having full knowledge of the site, plans and specifications for the following improvement and the conditions of this proposal, hereby agrees to furnish all services, labor, materials, and equipment necessary to complete the entire project, according to the plans, specifications and completion dates, and to accept the unit prices specified below for each item as full compensation for the work in this proposal.

Date Set for Completion: **8/31/2005**

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**Unit Price Contract**

FOR IMPROVING SECTION SUM-77-8.86 (SWARTZ ROAD), IN COVENTRY TOWNSHIP, SUMMIT COUNTY, OHIO, IN ACCORDANCE WITH PLANS AND SPECIFICATIONS BY GRADING, DRAINING, PAVING WITH ASPHALT CONCRETE ON A BITUMINOUS AGGREGATE BASE AND REHABILITATING EXISTING STRUCTURE.

Project Length: 0.09 Miles.

Work Length: 0.11 Miles.

Pavement Width: 24.00

Project Number: 050056

**Section 0001 ROADWAY**

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0001		201E11000	CLEARING AND GRUBBING (WT: 01)	01	LS	1.000
0002		202E23010	PAVEMENT REMOVED, ASPHALT (WT: NR)	NR	SY	349.000
0003		202E23500	WEARING COURSE REMOVED (WT: NR)	NR	SY	143.000
0004		202E30700	CONCRETE BARRIER REMOVED (WT: NR)	NR	FT	227.000
0005		202E38000	GUARDRAIL REMOVED (WT: NR)	NR	FT	663.000
0006		202E75000	FENCE REMOVED (WT: NR)	NR	FT	33.000
0007		203E10000	EXCAVATION (WT: 06)	06	CY	153.000
0008		203E20000	EMBANKMENT (WT: 06)	06	CY	36.000
0009		204E10000	SUBGRADE COMPACTION (WT: 06)	06	SY	454.000
0010		209E60201	LINEAR GRADING, AS PER PLAN (WT: 06)	06	STA	11.000
0011		606E13000	GUARDRAIL, TYPE 5 (WT: 36)	36	FT	1,012.500
0012		606E22000	ANCHOR ASSEMBLY, TYPE B-98 (WT: 36)	36	EACH	2.000
0013		606E22010	ANCHOR ASSEMBLY, TYPE E-98 (WT: 36)	36	EACH	6.000
0014		606E26500	ANCHOR ASSEMBLY, TYPE T (WT: 36)	36	EACH	2.000
0015		606E35000	BRIDGE TERMINAL ASSEMBLY, TYPE 1 (WT: 36)	36	EACH	6.000
0016		607E20000	FENCE, TYPE CL (WT: 37)	37	FT	33.000
0017		609E24510	CURB, TYPE 4-C (WT: 38)	38	FT	96.000
0018		622E10160	CONCRETE BARRIER, SINGLE SLOPE, TYPE D (WT: 38)	38	FT	100.000

**Section 0002 EROSION CONTROL**

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0019		659E00300	TOPSOIL (WT: 46)	46	CY	41.000
0020		659E10000	SEEDING AND MULCHING (WT: 46)	46	SY	373.000
0021		659E14000	REPAIR SEEDING AND MULCHING (WT: 46)	46	SY	19.000
0022		659E15000	INTER-SEEDING (WT: 46)	46	SY	19.000
0023		659E20000	COMMERCIAL FERTILIZER (WT: 46)	46	TON	0.060
0024		659E31000	LIME (WT: 46)	46	ACRE	0.100
0025		659E35000	WATER (WT: 46)	46	MGAL	2.000
0026		660E20000	SODDING REINFORCED (WT: 46)	46	SY	80.000
0027		832E30000	EROSION CONTROL (WT: 08)	08	EACH	5,000.000

Project Number: 050056

**Section 0003 DRAINAGE**

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0028		605E31100	AGGREGATE DRAINS (WT: 35)	35	FT	63.000

**Section 0004 PAVEMENT**

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0029		302E46000	ASPHALT CONCRETE BASE, PG64-22 (WT: 10)	10	CY	91.000
0030		304E20000	AGGREGATE BASE (WT: 09)	09	CY	70.000
0031		407E10000	TACK COAT (WT: 10)	10	GAL	41.000
0032		407E14000	TACK COAT FOR INTERMEDIATE COURSE (WT: 10)	10	GAL	22.000
0033		408E10000	PRIME COAT (WT: 10)	10	GAL	164.000
0034		448E46050	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22 (WT: 10)	10	CY	19.000
0035		448E46061	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, PG64-22, AS PER PLAN (WT: 10)	10	CY	49.000
0036		448E47020	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (WT: 10)	10	CY	19.000

**Section 0005 SANITARY SEWER**

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0037		604E34500	MANHOLE ADJUSTED TO GRADE (WT: 35)	35	EACH	2.000

**Section 0006 TRAFFIC CONTROL**

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0038		626E00300	BARRIER REFLECTOR, TYPE A2 (WT: NR)	NR	EACH	6.000
0039		626E00400	BARRIER REFLECTOR, TYPE B2 (WT: NR)	NR	EACH	7.000
0040		630E02100	GROUND MOUNTED SUPPORT, NO. 2 POST (WT: 42)	42	FT	64.000
0041		630E80100	SIGN, FLAT SHEET (WT: 42)	42	SF	19.000
0042		630E84900	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (WT: NR)	NR	EACH	5.000
0043		630E86002	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL (WT: NR)	NR	EACH	5.000
0044		642E00100	EDGE LINE, TYPE 1 (WT: 45)	45	MILE	0.170
0045		642E00300	CENTER LINE, TYPE 1 (WT: 45)	45	MILE	0.090

**Section 0007 MAINTENANCE OF TRAFFIC**

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0046		614E11100	LAW ENFORCEMENT OFFICER WITH PATROL CAR (WT: 39)	39	HOUR	100.000

Project Number: 050056

0047	614E12336	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) (WT: 39)	39	EACH	32.000
0048	614E12420	DETOUR SIGNING (WT: 39)	39	LS	1.000
0049	614E13000	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC (WT: 39)	39	CY	100.000
0050	614E13300	BARRIER REFLECTOR, TYPE B (WT: NR)	NR	EACH	40.000
0051	614E13350	OBJECT MARKER, ONE WAY (WT: NR)	NR	EACH	38.000
0052	614E18601	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN (WT: 39)	39	SNMT	15.000
0053	614E22200	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I (WT: 39)	39	MILE	21.610
0054	614E23400	WORK ZONE CHANNELIZING LINE, CLASS I, 740.06, TYPE I (WT: 39)	39	FT	40,960.000
0055	616E10000	WATER (WT: NR)	NR	MGAL	2.000
0056	622E40020	PORTABLE CONCRETE BARRIER, 32" (WT: 39)	39	FT	14,400.000

**Section 0008 STRUCTURE OVER 20 FOOT SPAN BRIDGE NO. SUM-77-0886**

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0057		202E11203	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (WT: 19)	19	LS	1.000
0058		202E22900	APPROACH SLAB REMOVED (WT: NR)	NR	SY	180.000
0059		503E21301	UNCLASSIFIED EXCAVATION, AS PER PLAN (WT: 21)	21	LS	1.000
0060		509E10000	EPOXY COATED REINFORCING STEEL (WT: 23)	23	LB	94,477.000
0061		510E10000	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT (WT: 21)	21	EACH	358.000
0062		511E43201	CLASS C CONCRETE, PIER, AS PER PLAN (WT: 21)	21	CY	14.000
0063		511E45701	CLASS C CONCRETE, ABUTMENT, AS PER PLAN (WT: 21)	21	CY	42.000
0064		511E50001	CLASS HP CONCRETE, BRIDGE DECK, AS PER PLAN (WT: 21)	21	CY	363.000
0065		511E50101	CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN (WT: 21)	21	CY	91.000
0066		511E52000	CLASS HP CONCRETE, TEST SLAB (WT: 21)	21	LS	1.000
0067		513E10201	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN (WT: 24)	24	LB	1,900.000
0068		513E20000	WELDED STUD SHEAR CONNECTORS (WT: 25)	25	EACH	2,730.000
0069		514E00050	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL (WT: 26)	26	SF	15,200.000
0070		514E00056	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT (WT: 26)	26	SF	15,200.000
0071		514E00060	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT (WT: 26)	26	SF	15,500.000
0072		514E00066	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (WT: 26)	26	SF	15,500.000
0073		514E00504	GRINDING FINES, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL (WT: 26)	26	MNHR	24.000
0074		514E10000	FINAL INSPECTION REPAIR (WT: 26)	26	EACH	4.000
0075		516E13900	2" PREFORMED EXPANSION JOINT FILLER (WT: 21)	21	SF	122.000
0076		516E14021	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN (WT: 21)	21	FT	101.000

Project Number: 050056

0077		516E44101	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN, (2.56"X1-1/2"X18", WITH 2"X12-1/2"X19" LOAD PLATE) (WT: 21)	21	EACH	10.000
0078		516E44101	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN, (2.68"X12"X19", WITH 2" X13"X20" LOAD PLATE) (WT: 21)	21	EACH	5.000
0079		516E44201	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN, (3.45"X10-1/2"X14", WITH 1-1/2"X 11-1/2"X15" LOAD PLATE) (WT: 21)	21	EACH	10.000
0080		516E47001	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN (WT: 21)	21	LS	1.000
0081		518E21200	POROUS BACKFILL WITH FILTER FABRIC (WT: 21)	21	CY	63.000
0082		518E40000	6" PERFORATED CORRUGATED PLASTIC PIPE, 707.33, TYPE SP (WT: 21)	21	FT	91.000
0083		518E40010	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, 707.33, TYPE S (WT: 21)	21	FT	97.000
0084		520E11100	PNEUMATICALLY PLACED MORTAR (WT: 21)	21	SF	276.000
0085		526E25001	REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN (WT: 20)	20	SY	199.000
0086		601E20001	CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN (WT: 21)	21	SY	500.000
0087		607E39900	SPECIAL - VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC (WT: 37)	37	FT	579.000
0088		625E25400	CONDUIT, 2", 725.04 (WT: 43)	43	FT	358.000
0089		625E29002	TRENCH, 24" DEEP (WT: 43)	43	FT	6.000
0090		625E29600	TRENCH IN PAVED AREA, TYPE B (WT: 43)	43	FT	62.000
0091		625E29900	JUNCTION BOX (WT: 43)	43	EACH	2.000
0092		625E31300	PULL BOX, 725.07, 16"X25" (WT: 43)	43	EACH	2.000
0093		864E10100	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) (WT: NR)	NR	SY	1,219.000

**Section 0009 INCIDENTALS**

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0094		103E05000	PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND (WT: NR)	NR	LS	1.000
0095		614E11000	MAINTAINING TRAFFIC (WT: 39)	39	LS	1.000
0096		619E16010	FIELD OFFICE, TYPE B (WT: NR)	NR	MNTH	6.000
0097		623E10000	CONSTRUCTION LAYOUT STAKES (WT: NR)	NR	LS	1.000
0098		624E10000	MOBILIZATION (WT: NR)	NR	LS	1.000



# SUMMIT COUNTY

PORTAGE & SUMMIT

	Rates	Fringes
Bricklayer.....	\$ 26.38	9.16

PORTAGE & SUMMIT

	Rates	Fringes
Stonemason.....	\$ 25.94	6.23

MEDINA, PORTAGE & SUMMIT

	Rates	Fringes
Carpenter.....	\$ 24.48	9.48

ASHLAND, ASHTABULA, CUYAHOGA, ERIE, GEAUGA, HURON, LAKE,  
LORAIN, MEDINA, PORTAGE, RICHLAND & SUMMIT

	Rates	Fringes
Diver, Wet.....	\$ 37.88	10.30
Piledrivermen; Diver, Dry.....	\$ 25.25	10.30

DIVERS - 8 HOURS' PAY MINIMUM

BELMONT, CARROLL, HARRISON, HOLMES, JEFFERSON, MEDINA, PORTAGE,  
STARK, SUMMIT & WAYNE

	Rates	Fringes
Line Construction		
Equipment Operator.....	\$ 21.69	6.21
Groundman.....	\$ 15.67	5.10
Lineman.....	\$ 24.10	6.66

MEDINA (Brunswick, Chatham, Granger, Guilford, Harrisville,  
Hinckley, Homer, Lafayette, Medina, Montville, Sharon, Spencer,  
Wadsworth, Westfield & York Townships), PORTAGE (Atwater,  
Aurora, Brimfield, Deerfield, Franklin, Mantua, Randolph,  
Ravenna, Rootstown, Shalersville, Streetsboro & Suffield  
Townships), SUMMIT & WAYNE (Baughman, Canaan, Chester,  
Chippewa, Congress, Green, Milton, & Wayne Townships)

	Rates	Fringes
Cable splicer.....	\$ 32.40	9.21
Electrician.....	\$ 30.00	9.10

ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA,  
PORTAGE & SUMMIT

	Rates	Fringes
Operating Engineer		
GROUP 1.....	\$ 27.38	8.60
GROUP 2.....	\$ 27.28	8.60
GROUP 3.....	\$ 26.24	8.60
GROUP 4.....	\$ 25.02	8.60
GROUP 5.....	\$ 19.73	8.60
MASTER MECHANIC.....	\$ 27.63	8.60

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - Air Compressor on Steel Erection; Barrier Moving Machine; Boiler Operator on Compressor or Generator when mounted on a Rig; Cableway; Combination Concrete Mixer & Tower; Concrete Plant (over 4 yd. Capacity); Concrete Pump; Crane (All Types, Including Boom Truck, Cherry Picker); Crane-Compact, Track or Rubber over 4,000 lbs. capacity; Cranes-Self Erecting, Stationary, Track or Truck (All Configurations); Derrick; Dragline; Dredge (Dipper, Clam or Suction); Elevating Grader or Euclid Loader; Floating Equipment (All Types); Gradall; Helicopter Crew (Operator-Hoist or Winch); Hoe (all types); Hoisting Engine on Shaft or Tunnel Work; Horizontal Directional Drill (over 500,000 ft. lbs. thrust); Hydraulic Gantry (Lifting System); Industrial-Type Tractor; Jet Engine Dryer (D8 or D9) Diesel Tractor; Locomotive (Standard Gauge); Maintenance Operator Class A; Mixer, Paving (Single or Double Drum); Mucking Machine; Multiple Scraper; Piledriving Machine (All Types); Power Shovel; Prentice Loader; Quad 9 (Double Pusher); Rail Tamper (with auto lifting & aligning device); Refrigerating Machine (Freezer Operation); Rotary Drill, on Caisson work; Rough Terrain Fork Lift with Winch/Hoist; Side-Boom; Slip-Form Paver; Tower Derrick; Tree Shredder; Trench Machine (Over 24" wide); Truck Mounted Concrete Pump; Tug Boat; Tunnel Machine and/or Mining Machine; & Wheel Excavator

GROUP 2 - Asphalt Paver; Automatic Subgrader Machine, Self-Propelled (CMI Type); Bobcat Type and/or Skid Steer Loader with Hoe Attachment Greater than 7,000 lbs.; Boring Machine More than 48"; Bulldozer; Endloader; Hydro Milling Machine; Kolman-type Loader (production type-Dirt); Lead Greaseman; Lighting & Traffic Signal Installation Equipment (includes all groups or classifications); Material Transfer Equipment (Shuttle Buggy) Asphalt; Pettibone-Rail Equipment; Power Grader; Power Scraper; Push Cat; Rotomill (all), Grinders & Planers of All types; Trench Machine (24" wide & under); & Vermeer type Concrete Saw

GROUP 3 - A-Frame; Air Compressor on Tunnel Work (low pressure); Asphalt Plant Engineer; Bobcat-type and/or Skid Steer Loader with or without Attachments; Highway Drills (all types); Locomotive (narrow gauge); Material Hoist/Elevator; Mixer, Concrete (more than one bag capacity); Mixer, one bag capacity (Side Loader); Power Boiler (Over 15 lbs. Pressure) Pump Operator installing & operating Well Points; Pump (4" & over discharge); Roller, Asphalt; Rotovator (lime soil stabilizer); Switch & Tie Tampers (without lifting & aligning device); Utility Operator (Small equipment); & Welding Machines

GROUP 4 - Backfiller; Ballast Re-locator; Bars, Joint & Mesh Installing Machine; Batch Plant; Boring Machine Operator (48" or less); Bull Floats; Burlap & Curing Machine; Concrete Plant (capacity 4 yd. & under); Concrete Saw (Multiple); Conveyor (Highway); Crusher; Deckhand; Farm-type Tractor with attachments (highway) except Masonry; Finishing Machine; Fireperson, Floating Equipment (all types); Fork Lift (highway); Form Trencher; Hydro Hammer; Hydro Seeder; Pavement Breaker; Plant Mixer; Post Driver; Post Hole Digger (Power Auger); Power Brush Burner; Power Form Handling Equipment; Road Widening Trencher; Roller (Brick, Grade & Macadam); Self-Propelled Power Spreader; Self-Propelled Power Subgrader; Steam Fireperson; Tractor (Pulling Sheepfoot, Roller or Grader); & Vibratory Compactor with Integral Power

GROUP 5 - Compressor (Portable, Sewer, Heavy & Highway); Drum  
 Fireperson (Asphalt); Generator; Masonry Fork Lift;  
 Inboard-Outboard Motor Boat Launch; Masonry Fork Lift; Oil  
 Heater (asphalt plant); Oiler; Power Driven Heater; Power  
 Sweeper & Scrubber; Pump (under 4" discharge);  
 Signalperson; Tire Repairperson; & VAC/ALLS

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ASHTABULA (North of Route 6, starting at the Geauga County  
 Line, proceeding east to State Route 45), CUYAHOGA, ERIE  
 (Eastern 2/3), GEAUGA, HURON (East of a line drawn from the  
 north border through Monroeville & Willard), LAKE, LORAIN,  
 MEDINA (North of Old Rte. #224), PORTAGE (West of a line from  
 Middlefield to Shalersville to Deerfield) & SUMMIT (North of  
 Old Rte. #224, including city limits of Barberton)

	Rates	Fringes
Ironworker		
Ornamental; Reinforcing &		
Structural.....	\$ 25.90	15.53

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ASHLAND, CARROLL, COLUMBIANA (W. of a line from Damascus to  
 Highlandtown), COSHOCTON (E. of a line beginning at NW Co. line  
 going through Walhonding & Tunnel Hill to the South Co. line),  
 HOLMES, HURON (S. of Old Rte. #224), MAHONING (S. of Old Rte.  
 #224), MEDINA (S. of Old Rte. #224), PORTAGE (S. of Old Rte.  
 #224), RICHLAND, STARK, SUMMIT (S. of Old Rte. #224, Excluding  
 city limits of Barberton), TUSCARAWAS, & WAYNE

	Rates	Fringes
Ironworkers:Structural,		
Ornamental and Reinforcing.....	\$ 20.76	12.92

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Rates Fringes

Laborer

ASHTABULA, ERIE, HURON, LORAIN, LUCAS, MAHONING, MEDINA, OTTAWA, PORTAGE, SANDUSKY, STARK, SUMMIT, TRUMBULL & WOOD COUNTIES		
GROUP 1.....	\$ 22.90	5.15
GROUP 2.....	\$ 23.07	5.15
GROUP 3.....	\$ 23.40	5.15
GROUP 4.....	\$ 23.85	5.15
CUYAHOGA AND GEAUGA COUNTIES ONLY: SEWAGE PLANTS, WASTE PLANTS AND WATER TREATMENT FACILITIES CONSTRUCTION		
Laborers.....	\$ 25.51	5.15
CUYAHOGA, GEAUGA & LAKE COUNTIES		
GROUP 1.....	\$ 24.13	5.15
GROUP 2.....	\$ 24.30	5.15
GROUP 3.....	\$ 24.63	5.15
GROUP 4.....	\$ 25.08	5.15
REMAINING COUNTIES OF OHIO		
GROUP 1.....	\$ 22.47	5.15
GROUP 2.....	\$ 22.64	5.15
GROUP 3.....	\$ 22.97	5.15
GROUP 4.....	\$ 23.42	5.15

LABORER CLASSIFICATIONS

GROUP 1 - Asphalt Laborer; Carpenter Tender; Concrete Curing Applicator; Dump Man (Batch Truck); Guardrail and Fence Installer; Joint Setter; Laborer (Construction); Landscape Laborer; Mesh Handlers & Placer; Right-of-way Laborer; Riprap Laborer & Grouter; Scaffold Erector; Seal Coating; Surface Treatment or Road Mix Laborer; Sign Installer; Slurry Seal; Utility Man; Bridge Man; Handyman; Waterproofing Laborer; Flagperson; Hazardous Waste (level D); Diver Tender; Zone Person & Traffic Control

GROUP 2 - Skid Steer; Asphalt Raker; Concrete Puddler; Kettle Man Pipeline); Machine Driven Tools (Gas, Electric, Air); Mason Tender; Brick Paver; Mortar Mixer; Power Buggy or Power Wheelbarrow; Sheeting & Shoring Man; Surface Grinder Man; Plastic Fusing Machine Operator; Pug Mill Operator; & Vacuum Devices (wet or dry); Rodding Machine Operator; Diver; Screwman or Paver; Screed Person; Water Blast, Hand Held Wand; Pumps 4" & Under (Gas, Air or Electric) & Hazardous Waste (level C); Air Track and Wagon Drill; Bottom Person; Cofferdam (below 25 ft. deep); Concrete Saw Person; Cutting with Burning Torch; Form Setter; Hand Spiker (Railroad); Pipelayer; Tunnel Laborer (without air) & Caisson; Underground Person (working in Sewer and Waterline, Cleaning, Repairing & Reconditioning); Sandblaster Nozzle Person; & Hazardous Waste (level B)

GROUP 3 - Blaster; Mucker; Powder Person; Top Lander; Wrencher (Mechanical Joints & Utility Pipeline); Yarner; Hazardous Waste (level A); Concrete Specialist; Concrete Crew in Tunnels (With Air-pressurized - \$1.00 premium); Curb Setter & Cutter; Grade Checker; Utility Pipeline Tapper; Waterline; and Caulker

GROUP 4 - Miner (With Air-pressurized - \$1.00 premium); & Gunite Nozzle Person

SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.

ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. of the East-West Turnpike) & SUMMIT (N. of the East-West Turnpike)

	Rates	Fringes
Painter		
COMMERCIAL NEW WORK; REMODELING; & RENOVATIONS		
GROUP 1.....	\$ 23.69	11.32
GROUP 2.....	\$ 23.99	11.32
GROUP 3.....	\$ 24.09	11.32
GROUP 4.....	\$ 24.39	11.32
GROUP 5.....	\$ 25.39	11.32
COMMERCIAL REPAINT		
GROUP 1.....	\$ 22.19	11.32
GROUP 2.....	\$ 22.49	11.32
GROUP 3.....	\$ 22.59	11.32
GROUP 4.....	\$ 22.89	11.32

PAINTER CLASSIFICATIONS - COMMERCIAL NEW WORK; REMODELING; & RENOVATIONS

GROUP 1 - Brush; & Roller

GROUP 2 - Swing Stage & Boatswain's Chair

GROUP 3 - Sandblasting & Buffing; Closed Steel - Man Below 55 feet - Sprayer; Pick Puller, Blower, Sandblaster, & Buffer

GROUP 4 - Spray Painting; Closed Steel - Man Above 55 feet; Open Structural Steel; Tanks - Water Towers; Bridge Painters; Bridge Riggers; Containment Builders

GROUP 5 - Bridge Blaster

PAINTER CLASSIFICATIONS - COMMERCIAL REPAINT

GROUP 1 - Brush; & Roller

GROUP 2 - Swing Stage & Boatswain's Chair

GROUP 3 - Sandblasting & Buffing; Closed Steel Below 55 feet - Sprayer-Pick-Puller-Blower-Sandblaster-Buffer

GROUP 4 - Spray Painting

MEDINA, PORTAGE (Up to & including the Ohio Turnpike) & SUMMIT (Up to & including the Ohio Turnpike)

	Rates	Fringes
Painter		
GROUP 1.....	\$ 21.52	6.55
GROUP 2.....	\$ 22.17	6.55
GROUP 3.....	\$ 22.27	6.55
GROUP 4.....	\$ 22.37	6.55
GROUP 5.....	\$ 22.77	6.55

PAINTER CLASSIFICATIONS

GROUP 1 - Brush; & Roller

GROUP 2 - Epoxy Application

GROUP 3 - Swing Scaffold, Bosum Chair & Window Jack

GROUP 4 - Spray Gun Operator

GROUP 5 - Follow-up Man Using Automatic Tools; Sandblast; Standpipes, etc. from Swinging Scaffolds; Bridge Work and/or Open Structural Steel; Standpipes & Water Towers; Synthetic Exterior Coatings; & Lead Abatement

ASHTABULA, CUYAHOGA, GEAUGA, LAKE, MEDINA (N. of Rte. #18 & Smith Road) & SUMMIT (N. of Rte. #303, including the corporate limits of the city of Hudson)

	Rates	Fringes
Plumber.....	\$ 32.60	10.50

ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN (the C.E.I. Power House in Avon Lake), MEDINA (N. of Rte. #18) & SUMMIT (N. of #303)

	Rates	Fringes
Pipefitter.....	\$ 30.47	12.62

MEDINA (Rte. #18 from eastern edge of Medina Co., west to eastern corporate limits of the city of Medina, & on the county road from the west corporate limits of Medina running due west to and through community of Risley to the western edge of Medina County - All territory south of this line), PORTAGE & SUMMIT (S. of Rte. #303)

	Rates	Fringes
Plumber and Steamfitter.....	\$ 27.26	12.03

STATEWIDE, EXCEPT CUYAHOGA, GEAUGA & LAKE

	Rates	Fringes
Truck Driver		
GROUP 1.....	\$ 19.69	7.47
GROUP 2.....	\$ 19.74	7.47
GROUP 3.....	\$ 19.79	7.47
GROUP 4.....	\$ 19.89	7.47
GROUP 5.....	\$ 20.16	7.47

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Asphalt Distributor; Batch; 4- Wheel Service; 4-Wheel Dump; & Oil Distributor

GROUP 2 - Tandem

GROUP 3 - Tractor-Trailer Combination: Fuel; Pole Trailer; Ready Mix; Semi-Tractor; & Asphalt Oil Spraybar Man When Operated From Cab

GROUP 4 - 5 Axles & Over

GROUP 5 - Belly Dump; End Dump; Articulated Dump; Heavy Duty Equipment; Low Boy; & Truck Mechanic

\*Please Staple certified check, cashiers check or bid bond here\*

**(This Page Must Be Executed And Dated Prior To Submission Of This Bid)**

**EXECUTION OF PROPOSAL AND CONTRACT**

On acceptance of the proposal for said work I do hereby bind the below referenced company to enter into a written contract with the Director of the Ohio Department of Transportation within ten (10) days from the date of notice of award.

Further, I acknowledge that I am fully aware of the site, plans and specifications for the above improvement and the conditions of this proposal, and I hereby agree to furnish all services, labor, materials, and equipment necessary to complete the entire project, according to the plans, specifications and completion dates, and to accept the unit prices specified above for each item as full compensation for the work in this proposal.

**Further, by my signature on this proposal I certify, under penalty of perjury and under other such penalties as the laws of the State of Ohio and the United States of America provide, that neither I nor anyone in my company or agent thereof has violated Title 23 United States Code, Section 112 Non-Collusion Affidavit, and further I certify, except as previously noted under penalty of perjury and under other such penalties as the laws of the State of Ohio and the United States of America provide, that I, the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of federal funds are in compliance with the aforementioned Certification Against Debarment And Suspension Clause.**

Date: \_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
Title of Officer Signing

\_\_\_\_\_  
Name of Company

\_\_\_\_\_  
Federal Tax ID No.