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STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

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WILLIAM D. ANKNER, Ph.D.
SECRETARY

March 11, 2009

STATE PROJECT NO. 194-02-0061
FEDERAL AID PROJECT NO. 1204(504)
MERMENTAU RIVER BRIDGE REHABILITATION
ROUTE LA 82
CAMERON PARISH

SUBJECT: ADDENDUM NO. 1 (CONSTRUCTION PROPOSAL AND PLAN REVISION)

Gentlemen:

The following proposal revisions dated 03/11/2009 on the captioned project for which bids will be received on Wednesday, March 18, 2009 have been posted on <http://www.dotd.la.gov/cgi-bin/construction.asp>; and a plan revision is also detailed:

1. Deleted the special provision entitled **Award of Contract**.
2. Revised the special provisions entitled **Item S-19, Field Paint Existing Bridge Metalwork, and Contract Time**. (18 pages)
3. Added the special provision entitled **Determination and Extension of Contract Time**. (1 page)
4. On sheet 38 of the plans, second paragraph of the Machinery Specifications (M-1 – M-9, and B-1 – B-5) section, the second sentence is deleted and the following substituted: "All parts listed on barrier sheets B1 – B-5 shall be included in Item 809-01, Movable Bridge Machinery, per lump sum, including all necessary ancillary parts."

Please note these revisions in the proposal and plans, and bid accordingly. Revised plan sheets will not be furnished at this time, but will be provided to the successful bidder as part of the construction documents. Mandatory electronic bidding is required for this project, and electronic bids and electronic bid bonds must be submitted via www.bidx.com for this letting date.

Sincerely,

RANDAL D. SANDERS, P. E.
CONTRACTS & SPECIFICATIONS ENGINEER

Attachments

cc: Mr. Brian Buckel
Mr. Robert Hennigan
Mr. Brian Morgan
Mr. Stewart Hingle
Ms. Margaret Thompson
Mr. Masood Rasouljian

ITEM S-19, FIELD PAINT EXISTING BRIDGE METALWORK: This item consists of cleaning and painting of all existing steel bridge members, and other metalwork including the complete roadway railing system, rigid traffic barricades and pipe or conduit supports and any other existing metalwork attachments within the limits shown on the contract plans. Cleaning of the surface includes the removal of all existing cracked or loose coatings, corrosion, and any other contaminants and the establishment of the proper anchor profile on all cleaned bare metal surfaces. The item also includes the containing and collecting of the blast or power tool cleaning debris, temporary site storage of collected debris, sampling, testing, transporting, recycling and treatment and disposing of potentially hazardous materials and all other collected debris. All in accordance with the plans, project specifications, these special provisions and in compliance with all applicable federal, state, and local laws, rules, regulations and ordinances.

GENERAL REQUIREMENTS: The Contractor will not be allowed to clean or paint at night. All cleaning and painting shall be performed only during daylight hours. Other operations may be done at night provided all requirements for such work are met.

The Contractor is advised that the existing coating system on the structure has been sampled and tested for lead, chromium, and cadmium and was found to contain lead and chromium at levels above the reporting limit (see the Paint Analysis Report Appendix A of this specification for additional information). As actual conditions across the bridge may vary the Contractor is encouraged to take any additional samples for his own testing or that he feels may be required to further characterize the existing coatings for the development of his bid and the proper conduct of the work. The Contractor is further warned and advised that the bridge metalwork may not have been blast cleaned in the past and metalwork underlying the existing coating may or may not contain mill scale and may or may not have an anchor profile.

The Contractor will be required to use recyclable steel abrasives should blast cleaning operations be conducted. Blasting waste and dust collector or vacuum system collected waste from cleaning operations shall be taken to a beneficial reuse facility such as a lead smelter as approved by the LADOTD. Previously used and/or recycled steel abrasives from other projects shall not be allowed for use on this project.

QUALIFICATION SUBMITTAL REQUIREMENTS:

The Contractor (or sub-contractor) will be required to possess a Louisiana contractors license from the Louisiana State Licensing Board for Contractors in each of the following specialty classifications before beginning work under S-19, Field Paint Existing Bridge Metalwork::

- a) Painting and Coating (Industrial and Commercial).
- b) Lead Based Paint Abatement and Removal.

Prior to any cleaning and painting of bridge metalwork, the contractor shall submit for approval to the DOTD Chief Construction Engineer, a copy of his (or sub-contractor's) current certifications from the Society for Protective Coatings (SSPC) in each of the following:

- a) SSPC-QP1, "Standard Procedure for Evaluating Qualifications of Painting Contractors (Field Application to Complex Structures)".
- b) SSPC-QP2, "Standard Procedure for Evaluation the Qualifications of Painting Contractors to Remove Hazardous Paint".

Within 20 days of certification submittal, the Chief Construction Engineer shall approve or reject the documentation. If the contractor's submittal is not approved, the contractor shall resubmit any changes in the contractor or sub-contractor qualifications submittal for approval within 14 days.

The above SSPC certifications must be maintained throughout the life of the project.

LIMITS OF CLEANING AND PAINTING: The limits of cleaning and painting are the Mermentau Bridge Route LA 82 from the west abutment at Station 38+52 to the east abutment at Sta. 49+01. Surfaces requiring cleaning and painting include all metalwork including bearing assemblies, the complete roadway railing system, rigid traffic barricades, steel bridge members, conduit or pipe brackets and any other metalwork attachments. Machinery metalwork and the moveable beam of the traffic barrier are to be cleaned and painted as required under their respective Bid Items.

Unpainted and non-rusted galvanized or aluminum elements of the structure such as unpainted sign supports, new galvanized roadway grating, new galvanized sidewalk plates, drainage pipes, conduits, hydraulic lines or pipes, roadway lights and all non-metallic conduits and cables shall not be cleaned or painted. All items not to be painted shall be covered or protected from cleaning and painting and shall be cleaned of overspray. The coverage and protection measures shall be submitted to and approved by the Engineer. Temporary removal of some attachments may be required to allow for proper cleaning and painting. Where the surfaces requiring cleaning and painting are covered by attachments not to be painted or the attachments interfere with the proper cleaning and painting of the area as determined by the Engineer, the attachments shall be removed to allow for complete cleaning and painting and then re-installed as soon as possible after cleaning, painting, and acceptance at no direct pay. The cleaned and painted areas shall be inspected by the Engineer's representative prior to replacement of the removed attachments.

The structure contains several utility conduits and hydraulic lines that run through cut-outs in the structure or are clamped to the structure. All utility conduits and hydraulic lines shall be temporarily repositioned, supported and protected as necessary to allow for complete cleaning and painting of the required areas including the clamps and the inside of all cut-outs. All clamps and conduits shall be replaced to their original location after cleaning, painting and acceptance of the required coated areas.

Any damage done to the bridge components including electrical conduit, signs and any other attachments shall be repaired or replaced as directed by and to the satisfaction of the Engineer. All electrical repairs shall be performed by a licensed electrician.

SAFETY STANDARDS: All personnel hired for work on this project, including those hired during the course of the work, shall be competent in their respective trades.

All personnel hired for work at the project site shall be examined in accordance with 29 CFR 1926.62(j)(3)(ii)(A)-(F) prior to employment for this project.

It shall be the Contractor's responsibility to comply with all applicable federal, state, and local laws, rules, regulations and ordinances pertaining to (a) Worker Safety and (b) Environmental Protection including, but not limited to, the following which are presented as illustrative examples:

A. WORKER SAFETY:

- 29 CFR 1910.106, "Flammable And Combustible liquids"
- NFPA 30, "Flammable and Combustible liquids Code"
- 29 CFR 1910, "Occupational Safety and Health Standards", et seq.
- 29 CFR 1926, "Safety and Health Regulations for Construction", et seq.
- 29 CFR 1926.62, "Lead", et seq.
- 40 CFR 117, "Determination of Reportable Quantities for Hazardous substances"
- NIOSH Method 7082 "Lead"
- OSHA Instruction CPL 2-02.58, "1926.62, Lead Exposure in Construction; Interim Final Rule – Inspection and Compliance Procedures"

The Contractor shall submit to the Engineer a written site specific compliance plan for review at least two (2) weeks prior to the pre-construction meeting. The compliance plan shall describe how the following standards will be met:

- Exposure monitoring [29 CFR 1926.62 (d)]
- Methods of compliance [29 CFR 1926.62 (e)]
- Respiratory Protection [29 CFR 1926.62 (f) and 1910.134 (b), (d), (e), (f)]
- Protective work clothing and equipment [29 CFR 1926.62 (g)]
- Housekeeping [29 CFR 1926.62 (h)]
- Hygiene Facilities and Practices [29 CFR 1926.62 (I)]
- Medical Surveillance [29 CFR 1926.62 (j)]
- Medical Removal Protection [29 CFR 1926.62 (k)]
- Employee information and training [29 CFR 1926.62 (l) and 1926.59 and 1926.21]
- Signs [29 CFR 1926.62 (m)]
- Record keeping [29 CFR 1926.62 (n)]
- Applicable sections of 1926.62 Appendices A-D
- Flammable and Combustible Material Storage [29 CFR 1910.106 and NFPA 30]

B. ENVIRONMENTAL PROTECTION:

- 40 CFR 50, "National Primary and Secondary Ambient Air Quality Standards"
- 40 CFR 60, "Standards for Performance for New Stationary Sources," Appendix A, "Test Methods"
- 40 CFR 261, "Identification and Listing of Hazardous Waste"
- 40 CFR 262, "Standards Applicable to Generators of Hazardous Waste"
- 40 CFR 263, "Standards Applicable to Transportation of Hazardous Waste"
- 40 CFR 264, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities"
- 40 CFR 268, "Land Disposal Restrictions"
- EPA SW-846, "Test Methods for Evaluating Solid Waste-Physical/Chemical Methods", U.S. Environmental Protection Agency
- La. R.S. 30:2001, et seq., "Louisiana Environmental Quality Act" and enabling regulations found in Louisiana's "Environmental Regulatory Code: (most recent edition), particularly:
 - LAC 33:IX.101 et seq., "Water Quality Regulations"
 - LAC 33:V.101 et seq., "Hazardous Waste and Hazardous Materials"
 - LAC 33:III.101 et seq., "Air Quality Regulations"
 - La. R.S. 49:214.21 et seq., "State and Local Coastal Resources Management Act of 1978: and enabling regulations found in the "Louisiana Administrative Code"
 - LAC 43:I.701, et seq., "Coastal Management"

The Contractor shall be familiar with and have available at the jobsite, the following referenced industry guidelines:

- SSPC Guide 6 (CON), "Guide for Containing Debris Generated During Paint Removal Operations", as published by the Steel Structures Painting Council: The Society of Protective Coatings (SSPC)
- SSPC Guide 7 (DIS), "Guide for Disposal of Lead-Contaminated Surface Preparation Debris", as published by the Steel Structures Painting Council: The Society of Protective Coatings (SSPC)

The Contractor shall submit the name, address and credentials of an EPA recognized AIHA or A2LA accredited lead testing laboratory he intends to use for the testing of wastes generated by the cleaning operation; and the name, address and credentials of a duly licensed waste transporter and waste disposal or recycling facility(s) he intends to use to the Engineer for review prior to commencement of work.

Chain of Custody forms shall be required for all test specimens or samples taken from the project and transported to testing laboratories. Any Chain of Custody forms or Hazardous Waste Manifests shall be submitted to the Engineer for review as generated. Final documentation and applicable results shall be submitted to Engineer as completed.

The Contractor shall make its on-site changing, wash down, and discarded clothing disposal or laundering facilities and all safety training and personal protection equipment available to the Engineer, his representatives, and the Department at no additional cost. The Contractor shall provide immediate access to all work areas to the Engineer, his representatives, and the Department during the project.

The Contractor shall provide exposure assessments, exposure monitoring, equipment, hygiene facilities, and training as required by the Occupational Safety and Health Administration (OSHA) Interim Final Rule on Lead Exposure in Construction, to Department employees, and to employees of the Engineer who are acting as inspectors or project managers on projects where removal of lead based paint is occurring. For the purpose of this Special Provision, all references in the Interim Final Rule to "the Employer," with regard to providing exposure assessments, exposure monitoring, equipment, hygiene facilities, and training shall mean "the Contractor" and all references to employee(s) shall mean the Department's and the Engineers' employees. The Department and the Engineer shall be responsible for requiring their employee(s) to wear equipment and use facilities provided by the Contractor in accordance with the Interim Final Rule.

The Contractor shall provide the employee(s) protective clothing and equipment, change areas, showers, eating facilities, and hand washing facilities as required by the Interim Final Rule. Until the Contractor performs an employee exposure assessment and determines actual employee exposure, the Contractor shall provide to the employee(s) interim respiratory protection, which shall include the respirator, respirator training and fit testing, and a respirator program. The interim respirator protection provided to the employee(s) shall be based on anticipated exposure levels greater than the Permissible Exposure Limit (PEL) ($50 \text{ } \Phi\text{g}/\text{m}^3$), but less than 10 times the PEL ($500 \text{ } \Phi\text{g}/\text{m}^3$).

At a minimum, the Contractor shall provide the employee(s) with a half mask air purifying respirator with high efficiency particulate (HEPA) filters, which provides a respiratory protection factor of 10. If, through employee exposure assessment, the Contractor determines that the employee exposure level is greater than $500 \text{ } \Phi\text{g}/\text{m}^3$, the appropriate respirator shall be provided. At a minimum, the Contractor shall conduct an employee exposure assessment on one (1) employee designated by the Project Engineer. The initial exposure assessment and any additional exposure assessments shall be conducted, and the results reported, in accordance with the Interim Final Rule.

The results of the employee exposure assessment(s) shall be fully documented. The results of the employee exposure assessment(s) shall be determined and reported in time frames consistent with the Interim Final Rule. Employee exposure assessment results shall be forwarded directly to the Engineer.

The Contractor shall train all employees working on the project as and when designated by the Engineer. The Contractor shall provide the following information at the preconstruction meeting.

1. Name and qualifications of the trainer,
2. Location and time of the training.
3. An outline of the training to be provided.

Each employee shall be provided with a certificate of training by the Contractor. All training classes and manuals shall be presented and printed in language understood by each employee.

The training shall be conducted within Cameron Parish in the State of Louisiana. The training shall occur between the hours of 7:00 a.m. and 5:00 p.m. on Tuesday, Wednesday, or Thursday.

It shall be the Contractor's responsibility to obtain all permits required and to furnish the Engineer with copies of all applications and all issued permits.

PAINT SYSTEM:

- A. GENERAL: The contractor shall use the following coating system as manufactured by Wasser High Tech Coatings, Inc. Auburn, WA (800-627-2968). The specified coatings shall be used and no equal products are known to exist. Alternate coatings will not be considered for use.

WASSER HIGH-TECH COATINGS:

Spot Prime Coat: MC-Miozinc @ 3-5 mils DFT
 Full Intermediate Coat: MC-Miomastic @ 3-5 mils DFT
 Full Topcoat: MC-Ferrox A @ 2-4 mils DFT

The spot prime coat shall be applied at all locations where corrosion has been removed or where all existing coating has been removed exposing bare steel surfaces. The number of coats specified shall be the minimum number of coats applied to provide the required dry film thickness. Coating materials shall not be used until the Engineer has inspected the materials and each batch of paint has been tested by the DOTD Materials and Testing Section.

- B. INFORMATION TO BE PROVIDED: For each type of coating, the Contractor shall provide the manufacturer's application instructions and include the data listed below:

- Name of the company that manufactures the paint
- Surface preparation recommendations
- Primer, intermediate and finish coating pot life at the anticipated application temperatures
- Specific mixing instructions
- Percent volume solids (thinned and non-thinned)
- Minimum and maximum dry film thickness per coat and total system
- Minimum and maximum wet film thickness per coat
- Minimum and maximum curing time between coats, including atmospheric conditions for each
- Thinner recommended and maximum thinning ratios to be used with each coat of paint.
- Clean-up thinner, soaps, degreasers, etc.
- Ventilation requirements

- Allowable atmospheric conditions during which the paint shall be applied including ambient temperature, relative humidity, surface temperature and dew point temperature
- Allowable application methods
- Shelf life
- Product Technical Data Sheets
- Material Safety Data Sheets (MSDS)

C. **PRODUCT DELIVERY AND HANDLING:** Materials shall be delivered to the job site in their original, undamaged, unopened containers. Each container shall bear the name and address of manufacturer, manufacturer's brand name, trade name or trademark, color batch number, date of manufacture, shelf life and special directions. If the material is dated in code, the key to interpret the code shall be provided to the Engineer. All rejected materials shall be removed from the job site immediately.

Paints shall be stored in an enclosed, ventilated or heated structures at 40°F (4°C) to 100°F (38°C) and shall be protected from weather. Storage facilities shall be power ventilated or heated to insure that inside temperatures do not exceed the minimum and maximum storage temperatures. Coating materials exposed to temperatures beyond the minimum or maximum shall be resubmitted to the material lab for retesting and shall be certified by the manufacturer in writing as undamaged by such exposure and suitable for use. Flammable materials shall not be stored within 40 feet of any existing or temporary building or structure. Should this requirement conflict with any federal, state or local code, the more stringent shall apply. Damaged materials and materials exceeding the shelf life shall be removed from the site. The maximum size of paint containers shall not exceed 5 gallons.

All containers of paint shall remain unopened until required for use. Those containers which have been previously opened shall be used first. The label information shall be legible and shall be checked at the time of use. Paint which has livered, gelled, or otherwise deteriorated during storage shall not be used. The oldest paint of each kind shall be used first. In every case, paint is to be used before its shelf life has expired. In order to use paints which are more than one year old, the manufacturer must certify in writing that the paint is still suitable for use.

D. **COLOR:** Three (3) sets of each coating color samples (minimum coupon size 3 inches by 6 inches (75 mm by 150 mm)) shall be submitted to the Engineer for approval before delivery of materials. The topcoat color shall match the standard "Louisiana Gray" topcoat color available from the Materials and Testing Section.

After the coating color samples have been approved, and before delivery of materials, one set of color coating samples painted onto an 8-1/2 inches (216 mm) by 11 inches (280 mm) by 1/4 inch (6 mm) sheet of steel shall be submitted to the Engineer. The sheet shall be divided into four horizontal strips and painted as follows:

- Prime three strips starting from the bottom
- Paint intermediate coat on the two bottom strips
- Paint topcoat on the bottom strip
- Top strip to remain unpainted with blast profile exposed.

E. **COMPATIBILITY:** All paint, caulking, filler materials and equipment shall be compatible in use. Finish coats shall be compatible with prime coats; prime coats shall be

compatible with the surface to be coated; all tools and equipment shall be compatible with the coating to be applied.

F. OTHER MATERIALS: All other materials, not specifically described but required for a complete and proper installation of painting shall be selected by the Contractor subject to the approval of the Engineer.

G. SPARE SUPPLIES: From every batch of material, the Contractor shall provide one quart container of each color and type of coating. These spare paint supplies shall be submitted to the Engineer.

SURFACE PREPARATION: Cleaning of the surfaces to be painted shall include the removal of all existing cracked or loose coatings, corrosion, and any other contaminants and the establishment of the proper anchor profile on all cleaned bare metal surfaces.

All rusted metal surfaces, shall be cleaned either in accordance with the Commercial Blast Cleaning Standard SSPC SP6/NACE No.3 and shall be vacuum shrouded or fully contained per the requirements of SSPC- Guide 6 Containment Class 1A or by Power Tool Cleaning to Bare Metal per SSPC-SP11 and shall be vacuum shrouded or fully contained per the requirements of SSPC- Guide 6 Containment Class 1P. The visual standard form SSPC-VIS 1, SSPC-SP6 that corresponds to the initial rust condition will be used to judge acceptable steel cleanliness for blasting. Recyclable steel abrasives shall be used on the project and the abrasives shall meet the requirements of SSPC-AB3. All recycled metallic abrasive shall meet the cleanliness requirements of SSPC-AB2. Previously used and/or recycled abrasives from other projects shall not be allowed. The visual standard form SSPC-VIS 3, Visual Standards for Power and Hand Tool Cleaned Steel that corresponds to the initial rust condition will be used to judge acceptable steel cleanliness for power tool cleaning to bare metal. Vacuum blasting or vacuum shrouded power tools shall contain integral vacuum-equipped shrouding and a brush or rubber sleeve on the shrouding which conforms to the surface to provide for control of dust and debris collection. When vacuum shrouded blast cleaning or vacuum shrouded power tool cleaning is employed, ground covers or free-hanging tarpaulins are required and may provide controls equivalent to Class 1A or 1P containments. All vacuum equipment shall be equipped with HEPA filters to control lead emissions.

All existing painted surfaces with areas of cracked or loose coating shall be removed by use of vacuum shrouded power tools to remove all cracked or loose layers of paint.

All intact painted surfaces to be recoated shall be cleaned by Low- Pressure Water Cleaning (LP WC) in accordance with SSPC- SP12 / NACE No.5 - Surface Preparation and Cleaning of Steel and Other Hard Materials by High- and Ultrahigh-Pressure Water Jetting Prior to Recoating to provide a WJ-4 visible surface condition and an SC-2 non-visible surface condition. Prior to or in conjunction with pressure washing all surfaces to be recoated are to be treated with a liquid soluble salt remover such as Chlor*rid as manufactured by Chlor*rid International Inc. Chandler, AZ 800-422-3217 or approved equal. Salt removal and pressure washing shall be conducted within 8 hours of painting. If more than 8 hours have elapsed the surfaces shall be tested to determine if it meets the requirements of an SC-2 non-visible surface condition, if not the surfaces shall be retreated with salt remover and pressure washed again.

Deposits of oil or grease are known to exist and shall be removed prior to all cleaning operations. Areas of oil and grease on surfaces to be cleaned shall be removed by solvent cleaning per the requirements of SSPC-SP1 using detergents or suitable degreasers or clean petroleum solvents (that do not deposit a thin film) prior to specified cleaning.

Pack rust at connections and at other areas on the structure is to be removed to the satisfaction of the Engineer by using needle guns, power tools, hammers, chisels, or other methods which will not cause damage to the steel prior to or in conjunction with abrasive blasting or power tool cleaning. Scaling hammers may be used to remove heavy scale but heavier type chipping hammers which would excessively scar the metal shall not be used. Should pack rust not be removable by conventional cleaning methods at secondary member connections, as directed by and with the approval of the Engineer, the fasteners shall be removed and the connection disconnected to permit cleaning and removal of the pack rust. Following cleaning and painting the removed fasteners shall be replaced and the connection restored.

Prior to all surface preparation and painting operations, the Contractor shall protect all surfaces not scheduled to be cleaned and painted. Unpainted and non-rusted galvanized or aluminum metallic elements of the structure such as sign supports, utility conduits, roadway lights and any non-metallic conduits and cables shall be covered or protected and will not require cleaning nor painting unless specified and approved by the Engineer.

Surface profiles shall be 1.5 to 3.0 mils (380 to 760 μm) on cleaned rusted areas. Prior to the application of the spot prime coat, the Contractor shall verify the surface profile with X-Coarse Press-O-Film tape in accordance with Method C of ASTM D 4417 "Standard Test Methods for Field Measurement of Surface Profile of Blast Cleaned Steel."

All fins, tears, slivers, and burred or sharp edges that are present on any steel member, or that appear during the cleaning operations, shall be removed by grinding and the area re-blasted.

Cleaning and painting shall be scheduled so that dust and spray from the cleaning process will not fall on wet, newly painted surfaces.

All abrasive, dust and paint residue shall be removed from surfaces with a commercial grade HEPA filtered vacuum cleaner equipped with a brush-type cleaning tool, or by double blowing. If the double blowing method is used, the exposed top surfaces of all structural steel, including flanges, longitudinal stiffeners, splice plates, hangers, etc., shall be vacuumed after the double blowing operations are completed. The steel shall be kept dust free and primed within 8 hours after cleaning. In the event that 8 hours have passed since a cleaned surface has been approved for coating application the area shall be reinspected to assure compliance with the specified surface preparation standards and re-cleaned as necessary. The entire area enclosed within an active containment shall be completely blast cleaned and approved by the Engineer prior to the application of any coating. In the event that touch-up blasting is necessary once painting has begun within a contained area the areas where coating has been applied shall be allowed to dry and the coated area sectioned off and protected from damage from touch-up blasting activities. Should any damage to the applied coating occur, the affected area shall be completely re-cleaned and repainted. The occurrence of rusting after cleaning regardless of the time since it was blasted shall be cause for recleaning to restore the specified level of cleaning. Within the contained area, all blow-down operations must be completed prior to painting. Once painting has commenced, only vacuuming will be allowed. If any dust, as evidenced by simply wiping the surface with a finger, accumulates on a primed surface, all horizontal surfaces shall be vacuumed prior to subsequent coating.

Any scaffolding, staging or support steel above the area to be coated must be vacuumed and cleaned to prevent abrasive or dust from dropping onto the freshly cleaned surface, or later contaminating the freshly painted surface.

Freshly painted surfaces that are contaminated shall be re-cleaned and re-painted. All surfaces to be coated shall be completely free of grit, dirt or any contaminant prior to coating regardless of original contaminant.

The Contractor's Quality Control Inspector is required to confirm, in a written report to the Engineer, compliance with all applicable specifications prior to Quality Assurance Testing.

The Engineer or his representative can defer testing and/or acceptance of the work area until such time that all visible flaws and defects are corrected, and compliance is again verified by Contractor's QC Inspector. Once the Contractors' Quality Control Inspector has verified compliance with all applicable specifications and conducted all required testing, the Engineer or his representative will inspect surfaces to be painted prior to coating and will inspect the painting operation. This inspection does not relieve the Contractor of responsibility for proper preparation of the surface or application of the coating to the required dry film thickness. Any scaffolding and or staging shall remain in place in any particular work area until the Engineer or designated representative has accepted the completed work.

ELECTRICAL AND MECHANICAL EQUIPMENT MATERIAL AND INCIDENTALS: Extreme care shall be exercised when working in the vicinity of electrical cables and fixtures and machinery components. Prior to cleaning and/or painting operations in close proximity to the electrical cables, the Contractor may request that the cables be de-energized for the cleaning or painting operation. The disconnection time shall be between the hours of 7:00 a.m. and 3:00 p.m. Disconnections shall be coordinated with LADOTD electricians, who will perform the disconnection, and will require a minimum 3 working days advance notice. Electrical service will be restored intermittently when required for bridge operations. All machinery components shall be covered and protected from any abrasive or debris generated by cleaning operations but shall remain operational.

The Contractor shall submit a schedule for approval on times of power disconnect. After de-energized but prior to blasting or painting, the cables shall be suitably covered and protected from damage.

The coverage and protection measures for electrical and mechanical equipment shall be submitted to and approved by the Engineer. All costs associated with de-energizing and protection of electrical cables and equipment and machinery will be included in this item.

A lock-out, tag-out protocol shall be employed at the various electrical disconnect switches.

Plastic coated conduit and fittings, open wiring, cables and cords that exist on and around the bridge shall not be sandblasted nor painted and shall be cleaned of over spray. Any wiring and cables or conduit or hydraulic lines or equipment damaged by painting operations shall be replaced in its entirety at the Contractor's expense. All electrical repairs shall be performed by a licensed electrician. All mechanical repairs shall be performed by licensed machinist.

APPLICATION:

- A. **GENERAL:** Coatings application shall be in accordance with the manufacturer's recommendations, SSPC-PA 1 Paint Application Specification No. 1 and these specifications, whichever is more stringent. Coatings shall be applied only to surfaces prepared in accordance with these specifications. Paint systems may be applied by conventional air spray, airless spray equipment or brush in accordance with the manufacturer's recommendations and these specifications.

The finished surface shall be free from dry spray, over spray, runs sags, drips, excessive paint build-up, ridges, waves, laps, streaks, brush marks and variations in color, texture and finish (glossy or dull). The coverage shall be complete and each coat shall be so applied as to produce an even film of uniform thickness, completely coating corners and crevices, and bonded to the underlying surface. When spot repairs are necessary, the edges of the surrounding coating shall be feathered, leaving surfaces prior to painting tapered and free of loose or damaged coating. Care shall be exercised to avoid over

spraying or spattering paint on surfaces not to be coated. Damage to surfaces not to be coated shall be repaired by the Contractor at the Contractor's expense.

B. WEATHER LIMITATIONS: The Contractor's coating inspector shall perform necessary tests immediately before blasting and painting and at least every two hours during the painting operation to determine the dew point, temperature, and relative humidity. Readings shall be taken at the same area where the members are being coated. The Contractor's Quality Control Inspector will record all readings on applicable forms and submit daily to the Engineer or his representative.

- TEMPERATURE: Paint shall be applied in accordance with the manufacturer's recommendations and these specifications, whichever is the more stringent. Paint shall not be applied to steel which has a temperature that will cause blistering or porosity, or otherwise will be detrimental to the life of the paint.

Paint shall not be applied unless the surface temperature of the metal is at least 45°F (7°C) and rising, and shall not exceed a steel surface temperature of 100°F (38°C).

- MOISTURE: Paint shall not be applied during rain, snow, fog, or misty conditions, or when the steel surface temperature is less than 5°F or 3°C above the dew point. Paint shall not be applied to wet or damp surfaces.
- HUMIDITY: Where manufacturers have not made a different written recommendation, paints shall not be applied when the relative humidity exceeds 85 percent. During painting, and for a period of at least eight (8) hours after the paint has been applied, the temperature of the surfaces to be painted, the painted surfaces, and the atmosphere in contact shall be maintained within the temperature and humidity limits and 5°F or 3°C above the dew point. Paint, when applied shall be approximately the same temperature as that of the surface on which it is applied. Fans, heaters, ventilators or other equipment shall be used inside enclosed areas where conditions are not within the stated limits. When fresh paint is damaged by the elements, the containment, or other equipment, it shall be replaced by the Contractor at no direct pay.

C. PAINT PROPERTIES, MIXING, AND THINNING: Paints shall be thoroughly stirred, strained and kept at a uniform consistency during application. Coatings shall be mixed in accordance with the manufacturer's instructions, including listed weather tolerances. Where necessary to accommodate the conditions of the surface, temperature, weather and method of application, the paint may be thinned immediately prior to use by the addition of not more than the amount of thinner recommended by the manufacturer. Unless otherwise specified, paint shall not be reduced more than necessary to obtain the proper application characteristics. Thinner shall be only as recommended by the coating manufacturer.

D. METHODS OF PAINT APPLICATION: Paint shall not be applied to a surface until it has been prepared as specified. Paint shall be applied before any surface rusting occurs, or any dust or oil has accumulated. In the event that eight (8) hours have passed since the surface to be coated has been approved for coating application, the area shall be re-inspected to assure compliance with the surface preparation specified. After a coat is dry, missed or damaged spots shall be repaired before succeeding coats are applied.

The manufacturer's recommended minimum and maximum recoat periods shall be strictly observed. Where conditions require recoat after the recommended maximum recoat period, the Contractor shall employ the manufacturer's written recommended remedial procedures. Any coating removed during this process shall be replaced prior to applying additional coats. The Contractor shall protect adjacent surfaces already properly coated.

All coats that are spray applied shall be with nozzles and at pressures recommended by the producer of the coating, so as to attain a uniform appearance and the dry film thickness specified. In areas that are difficult to spray, brushing is required. The Contractor's equipment shall be designed for application of the materials specified. Compressors shall have suitable traps and filters to remove water and oil from the air.

Prior to using compressed air, the Contractor's Coating Inspector shall verify daily the cleanliness using a blotter test in accordance with ASTM D 4285 "Standard Test Method for Indicating Oil or Water in Compressed Air." The Contractor's Coating Inspector will record all test results on applicable forms and submit daily to the Engineer or his representative. Spray equipment shall be equipped with mechanical agitators, working pressure gages, pressure regulators, and spray nozzles of the proper sizes.

No paint shall be applied until the preceding coat is cured to prevent gassing or failure of the coating system.

Members shall be covered as necessary to prevent accumulation of dry spray on painted surfaces. All dry spray shall be removed by sanding, if necessary. In areas of deficient primer thickness, the areas shall be thoroughly cleaned as necessary to remove all dirt, grease, or other contaminants. The areas shall then be wire brushed or sanded, vacuumed, and recoated to the specific thickness. Where protection is provided for coated surfaces, such protection shall be preserved in place until the paint film has properly dried. Items which have been coated shall not be handled, worked on, or otherwise disturbed, until the paint coat is completely dry and hard. All damage to coated surfaces shall be repaired by the Contractor prior to removal of containment.

- E. **FILM THICKNESS:** Coatings shall be applied to provide dry film thicknesses within the range of specified. The Contractor's Coating Inspector is required to confirm and record during all coating application that wet film thickness readings are within the range that will produce dry film thickness within the range specified.

The Contractor shall not apply a successive coat until the preceding coat or coats have been approved by the Engineer.

- F. **DAMAGED AREAS:** Damaged Areas: All scaffolding to be used shall be equipped with rubber rollers or other protection to prevent damage of painted surfaces. Damage to previously applied coats shall be repaired by the Contractor at no direct cost to an acceptable condition prior to application of subsequent coats.
- G. **PROTECTION OF THE PUBLIC AND WORK:** The Contractor shall protect all parts of the work against disfigurement by splatters, splashes and smirches of paint materials. All painted surfaces that are marred or damaged shall be repaired with materials and to a condition equal to that of the coating system specified. The Contractor shall take all precautions necessary to protect the surface from contamination prior to or during the application process. The Contractor shall be responsible for all damage caused by the painting project to persons or property.

QUALITY CONTROL: The Contractor shall provide safe access to the job site for all workers and for the Engineer or his representative at all times while the work is in progress and throughout the life of this contract.

The Contractor shall comply with the safety and application procedures recommended for each paint system by the coating manufacturer.

Quality Control (QC) shall be the responsibility of the painting Contractor. It will be the responsibility of the painting Contractor to provide sufficient coating inspection personnel and documentation to assure full compliance with these specifications to the satisfaction of the Engineer. At a minimum there shall be one full time employee (either an employee of the painting Contractor or an independent coating inspector) at the site when operations start until completion of the painting of this project.

The Contractor shall provide documentation sufficient to satisfy the Engineer that the coating inspector is knowledgeable and capable of performing quality control duties. This documentation shall consist of at least three (3) years paint inspection experience and certificates showing that inspection training courses have been satisfactorily completed, including National Association of Corrosion Engineers (NACE) Certification (Successfully completed Level 1, Level 2, and Peer Review).

The Contractor Quality Control Inspector shall perform the following tests and record the following information in accordance with the referenced procedures and frequency:

- Relative Humidity and Dew Point Readings before and every 2 hours during painting and cleaning activities.
- Temperature Readings of air, material and steel surfaces before and every 2 hours during painting and cleaning activities.
- Profile Height Measurements.....ASTM D4417. Daily before coating.
- Visual Inspection of cleaned surfaces.....Prior to all coating application.
- Blotter Test Results.....ASTM D4285. Daily prior to cleaning or painting.
- Wet Film Thickness Measurements.....During all coating application for each applicator.
- Wind Speed and Direction.....Daily every 2 hours.

All QC testing during the painting and cleaning operations shall be performed by the NACE certified inspector as described above. Automatic devices may be used for the temperature, humidity, wind speed and direction readings using equipment approved by the Engineer and provided that the readings shall be taken at the same area where the members are being coated.

The painting Contractor shall be totally responsible for quality control regardless of the fact that the Department, the Engineer or their representatives are present. Copies of all required Quality Control testing reports shall be furnished to the Engineer on a daily basis and prior to Quality Assurance (QA) inspections. All inspection for Quality Assurance shall be done by the Engineer or his representative.

Prior to all coating application, surface preparation conditions must first be QC inspected, then QA inspected and approved by the Engineer or his representative

CONTAINMENT:

- A. **GENERAL:** The frequency and proximity of workers, the public and environmentally sensitive receptors to the project site requires a high level of emission control. The design and effective performance of the enclosure or the vacuum shrouding and the air flow and dust filtering equipment required is the responsibility of the Contractor.

The intent of this section is to specify a method to totally contain all spent materials, dust or mists and any other debris generated during the cleaning or subsequent vacuuming of the structure in preparation for overcoating. The method specified is for vacuum shrouding or total containment of the cleaning work area within a negative pressure enclosure.

Attachments made to any bridge member for securing the containment or equipment shall not damage the member and must be approved by the Engineer. No additional holes shall be drilled.

Containments if employed shall be constructed and configured such that once an area has been cleaned and any coating applied this area must be excluded from any future containment area, or portion thereof.

The Contractor shall not be permitted to ventilate a containment or portion thereof through an area that has been previously coated. This is to prevent deposit of dust on the painted surfaces.

Containments if employed shall be constructed and configured such that the swing span of the bridge shall remain operational at all times.

In the event that the National Weather Services issues a tropical storm or hurricane warning for the project area, those components of the containment system that would cause an overstress condition on any bridge member or the span as a whole, or that may become detached, shall be removed immediately from the structure. The items to be removed and the parameters for removal shall be identified on the containment design calculations and drawings. The contractor shall also submit for approval a detailed plan for removal of the necessary items. The plan shall demonstrate the contractor's ability to implement the plan including a description of the time frame, manpower requirements and equipment required to implement the plan. The removal and reinstallation of the containment system due to the high winds or approaching storms shall be at no direct pay and should be included in the bid price for this item. In the event it is necessary to suspend operations and remove containment and scaffolding, the Contractor shall retain a local contact to handle unsafe conditions that may be caused by the storm and stored on-site equipment. The local contact information shall be provided to the Engineer prior to the evacuation.

- B. CLASS AND TYPE OF CONTAINMENT: The following containment methodology is from the SSPC - Guide 6. Should blast cleaning within a containment be employed for required cleaning operations the Contractor shall design and utilize a SSPC Class 1A containment system. Should power tool cleaning within a containment be employed for required cleaning operations the Contractor shall design and utilize a SSPC Class 1P containment system. When vacuum shrouded blast cleaning or vacuum shrouded power tool cleaning is employed, ground covers or free-hanging tarpaulins are required and may provide controls equivalent to Class 1A or 1P containments.

The containment enclosures shall have air moving equipment attached capable of creating a negative pressure condition within. This pressure shall be sufficient to prevent any spent material or dust from leaving the enclosure during the cleaning. It shall also be capable of creating sufficient air flow through the enclosure to provide adequate visibility and a safe working environment for the blasting operators. The Contractor shall design the containment and ventilation system to provide a minimum of 60 feet per minute downdraft and 100 feet per minute cross-draft airflow within the containment. These are minimum design requirements and increased ventilation airflow or other engineering measures may be needed to provide a safe working environment. Auxiliary lighting shall

be used within the enclosure where necessary to illuminate the active work surface to a minimum of 550 lux. This is required for clear viewing of all cleaning, painting and inspection operations as directed by the Engineer. All air exhausted from the containment enclosure shall be filtered by means of filtering system or dust collectors. All filters or dust collectors shall be cleaned before bringing to the project site and shall be cleaned before removing from a project site. All dust collector and support equipment (grit recycling) filters must be brought onto the site with new filters. Supporting documentation such as invoices for the new filters shall be provided upon request.

At the completion of the project, all dust collector and support equipment (grit recycling) filters must be removed and transported to the approved smelting company. The filters are not to be landfilled. The Contractor is responsible for the design and effectiveness of this filtering equipment.

No dust discharge shall be allowed from the exhausted air from the filters, dust collectors, vacuum truck, or other support equipment used for pickup of spent materials. The Contractor shall conduct all blasting operations and grit recycling operations under containment and negative pressure conditions. Recycling operations are also subject to the same emission requirements that are required for the blast cleaning containment system. The combination of removal technique and containment system shall have the desired effect of preventing the release of airborne lead containing dust and debris to below the levels required by all local, state and federal regulations and to control the workers' environment within containment as required by OSHA regulations 29 CFR 1926.62. The containment shall control environmental emissions according to the following assessment criteria.

Failure to meet this criterion will result in the suspension of cleaning operations and require significant modification, or redesign of the containment system and/or work practice or removal technique or equipment prior to resuming cleaning operations.

SHOP DRAWINGS:

- A. GENERAL: Should the Contractor decide to employ blasting within a containment the Contractor shall submit to the Engineer at least 60 days prior to the commencement of work a Containment Design Plan for examination within the following guidelines.
- All drawings shall be original tracings conforming to Section 801.03 of the standard specifications.
 - The containment system shall be shown in plan and elevation views. Details shall include the containment enclosure, all materials, seals, supports, anchorage, scaffolding, air ventilation and filtration systems, anticipated loads on the structure, vertical and horizontal clearances, and the method of attachment to the structure.
 - Indicate the maximum permissible debris and wind loads permitted on the containment system and describe its installation and removal parameters and procedures.
 - The containment system with all anticipated loading shall be reviewed and stamped by a professional civil engineer registered in the State of Louisiana. The analysis shall ensure that the containment system and the Contractor's equipment shall not cause any overstress conditions to the bridge members nor compromise the structural integrity of the bridge. Calculations shall be submitted to the Engineer for review.
 - Permanent attachments or fasteners to the bridge will not be allowed. Welded connections to bridge members are prohibited. No additional holes shall be drilled.

- All components of the containment system shall be clearly identified on the drawings.
- No loads shall be attached to the bridge railing, walkways, or drainage structures without prior written consent of the Engineer.
- The Contractor shall submit six copies of the drawings for examination.

B. **EXAMINATION:** Examination of these working or shop drawings by the Engineer does not relieve the Contractor of his responsibility for obtaining the degree of containment and collection stated herein. Said examination is for general review only and confirmation that the loads placed on any member are within allowable stresses, to evaluate the general loads on the structure, and to establish the containment removal parameters. It specifically is not an approval for the structural integrity of the scaffolding system. The structural integrity of the scaffolding is solely the responsibility of the Contractor and the manufacturer of the scaffolding materials. The Contractor shall be fully responsible for safety measures and the scaffolding work. The Contractor shall properly maintain his containment system during work and shall not deviate from the working or shop drawings without prior submittal and examination of the changes by the Engineer.

ENVIRONMENTAL MONITORING:

METHODS FOR ASSESSING QUALITY OF EMISSIONS: The Contractor is advised that the Department may engage an independent third party to conduct environmental monitoring, including before and after soil sampling for lead and other contaminants, TSP Lead Levels, and Visual Assessment of Emissions. This monitoring may be continuous, however, the Engineer shall have the option of suspending or conducting only random or periodic monitoring if compliance with the acceptance criteria set by this specification is demonstrated.

The Contractor is advised that he should not assume he is in compliance with any or all environmental laws or regulations based on satisfactory results of the monitoring conducted by the Department or its representatives. This monitoring is being conducted only to aid in determining non-compliance with the contract specification containment requirements and to trigger the need for containment or work practice modification.

The Contractor shall be responsible for conducting any and all monitoring and assessments he deems necessary to assure compliance with all applicable environmental laws and regulations at his own expense.

A. **VISIBLE EMISSION ASSESSMENT:** The Contractor shall prohibit all cumulative visible emissions greater in duration than 5 percent of the work day. A work day shall be defined for purposes of visual emission assessment as an eight-hour day. This amounts to a cumulative emission duration limit of 24 minutes per workday. Any emissions occurring in any one hour of any work day that cumulatively exceeds 3 minutes shall be cause for immediate suspension of work and modification or adjustment of the containment system to eliminate the source of emissions prior to resuming cleaning operations.

The visual assessment of emissions will be used to indicate the need for immediate changes in containment or work practice. This visual assessment will be used as a supplement to EPA Ambient Air Monitoring for TSP – Lead. In the event of conflict between the visual assessment and the instrument monitoring the data generated from the instrument monitoring will prevail. The visual assessment procedure shall be based on 40 CFR 50, Appendix A, Method 22. Visual assessment shall be conducted by an

independent third party environmental testing firm under separate contract with the owner.

- B. INSTRUMENT MONITORING FOR TSP LEAD: The Contractor shall conduct his paint removal and cleaning operations such that emissions of lead shall not be in excess of $1.5 \text{ } \Phi\text{g}/\text{m}^3$ over a 24-hour period. Monitoring for this level shall be accomplished using high volume TSP (total suspended particulate) air samplers in accordance with 40 CFR 50.

Emissions in excess of $1.5 \text{ } \Phi\text{g}/\text{m}^3$ in any 24-hour period shall be cause for shut down of the project until corrections are made to the containment or work procedures are modified to comply with this level of emissions.

Seven (7) days of baseline monitoring prior to project start-up will be undertaken to determine pre-existing conditions.

DEBRIS ACCUMULATION AND PROJECT HOUSE KEEPING: Any discharge, spilling, leaking, pumping, pouring, emitting, or dumping of any abrasive blast media (spent or unspent), paint chips, dirt, debris, lead contaminated materials, fuel, oil, paints, or solvents that are generated as a result of any of the Contractor activities that result in any accumulation within the project limits, temporary waste storage site, or Contractor's equipment and materials storage yard shall be cleaned up immediately. Failure to immediately clean up any accumulations will result in immediate suspension of all work on the project by the Engineer. Also if the Engineer determines that the Contractor is not performing the clean up in a timely manner with adequate equipment and personnel all work will be suspended on the project. The source of the emission, spill, etc. shall be determined and corrective measures shall be taken to prevent any further reoccurrences. All accumulations shall be cleaned up by vacuuming or other appropriate methods and the emitted or spilled materials shall be contained and stored to the Engineer's satisfaction.

WASTE DISPOSAL: Disposal specifications described below are referenced to the SSPC-Guide 7 (DIS). Debris generated by the Contractor's cleaning operation, including abrasive blast residue, spent blast mediums, rust, mill scale, paint particles and dust shall be removed from the work area at the end of each work day.

These wastes shall be collected in leak-proof containers which shall be clearly marked of the hazards of its contents, tare weight of the container, and origin and date of the material collection with weather resistant labels. Transfer of this material from the work area to the containers and the storage site for the containers shall be such that no pollution of the environment will occur and workers are fully protected. The containers shall be transported to a temporary storage site in accordance with 40 CFR Part 263: "LAC 33:V." The Contractor will be responsible for obtaining the temporary storage site at no additional charge to the Department. This site shall be secure, providing protection from migration of the waste into the environment and from vandalism and public access. Warning signs shall be prominently displayed around the perimeter of the site. The wastes may remain at the temporary storage site no longer than ninety (90) calendar days.

Recyclable steel abrasives shall be employed for use if blast cleaning is employed as the cleaning method. All blasting waste and dust collector or vacuum shrouded power tool equipment generated waste shall be handled as a hazardous waste. These wastes shall be taken to a beneficial reuse facility such as a lead smelter. The reclaiming facility shall have a Resource Conservation and Recovery Act (RCRA) Part B permit. The facility shall provide the

Department with certification that the lead was reclaimed and that the waste has been recycled and no longer exists. All other waste streams shall be stored in separate containers. These waste streams shall be sampled and tested to determine their classification and shall be properly disposed of based on that classification. Steel additives to the blasting waste and the dust collector waste will not be allowed.

All waste shall be presumed to be hazardous until it is clearly demonstrated by appropriate sampling and testing to be non-hazardous. All hazardous or non-hazardous wastes shall be handled and stored as a hazardous waste.

Sampling of the wastes generated shall be in accordance with 40 CFR Part 261: "LAC 33:V." The sampling and testing laboratory designated by the Contractor and approved by the Engineer shall prepare a sampling plan in accordance with the Environmental Protection Agency's Manual SW 846.

The Engineer or his representative shall be present during the sampling of waste. The Engineer shall document that the samples are representative of wastes contained at the temporary storage site. The samples shall be analyzed in accordance with the best procedures and quality assurance requirements of 40 CFR Part 268: "LAC 33:V".

Wastes found to be hazardous are subject to the provisions of the RCRA. Transportation of hazardous wastes for treatment and disposal shall be completely manifested in accordance with 40 CFR Part 262: "LAC 33:V". A manifest will be required for transport of both hazardous and non-hazardous waste. The manifest shall be returned to the Engineer.

SPECIAL STENCILING: The date (month and year) of painting and type of paint system used shall be stenciled at two (2) locations determined by the Engineer on all structures in block letters 2-1/2 inches (63 mm) high. Existing panel points, bent nos., etc. shall be stenciled at their existing locations on the structure matching existing number and or letter size. The paint used shall form a contrast with the background and shall be compatible with the paint system used.

PAYMENT: Any damage to the structure or surrounding area, including soil contamination, resulting from the Contractor performing any of the above prescribed work shall be repaired, as directed by the Engineer, by the Contractor at no additional cost to the Department.

Payment for cleaning and painting of all structural metalwork and other attachments described herein; transportation, treatment, and disposal of all generated waste materials; and all equipment, labor, tools, sampling, testing, materials, temporary site storage, incidentals, and the performance of all work necessary to complete this item will be made under:

Item S-19, Field Paint Existing Bridge Metalwork, per lump sum.

See Appendix A for Existing Paint Analysis Report.

CONTRACT TIME: The entire contract shall be completed in all details and ready for final acceptance in accordance with Subsection 105.17(b) within **one hundred thirty (130) calendar days**.

Prior to assessment of contract time, the contractor will be allowed 100 calendar days from the date stipulated in the Notice to Proceed to commence with portions of the contract work including but not limited to assembly periods, preparatory work for materials fabrications such as test piles, or other activities which hinder progress in the beginning stages of construction. Prior to issuance of the Notice to Proceed, the Department will consider extending the assembly period upon written request from the contractor justifying the need for additional time.

The contractor shall be responsible for maintenance of traffic from the beginning of the assembly period. During the assembly period, the contractor will be allowed to do patching and other maintenance work necessary to maintain the roadway with no time charges when approved by the engineer.

If the contractor begins regular construction operations prior to expiration of the assembly period, the assessment of contract time will commence at the time construction operations are begun.

DETERMINATION AND EXTENSION OF CONTRACT TIME (12/08): Subsection 108.07, Determination and Extension of Contract Time, is amended to include the following.

The contractor shall document for each month of scheduled construction, the occurrence of adverse weather conditions having an impact on controlling items of work. An adverse weather day is a previously scheduled or normally scheduled work day on which rainfall, wet conditions or cold weather will prevent construction operations on the controlling work activity from proceeding for at least 5 continuous hours of the day or 65 percent of the normal work day, whichever is greater, with the normal working force engaged in performing the controlling item of work. If the contractor submits a written request for additional contract time due to adverse weather conditions, the contractor's request will be considered only after the Department agrees with the days and then only for adverse weather days in excess of the allowable number of days per month stated below. Adverse weather days will be documented by the Engineer and agreed upon monthly. Adverse weather days will be prorated for partial months when a work order or final inspection is issued other than the first or last of the month and agreed to by the Department. If the contractor is being considered for disqualification by the Department, an equitable adjustment in contract time may be made at the end of the original contract period, including all days added by approved change orders. Contract time will be adjusted by comparing the actual number of adverse weather days to the statistical number of adverse weather days over the specific time period per the table below. The resulting number of adverse weather days will be multiplied by 1.45 to convert to calendar days. Adjustments for adverse weather cannot result in a contract time reduction. Once adjusted, a new adverse weather day accounting will begin using the adverse weather conditions having an impact on the controlling items of work, in excess of the allowable number of days per month stated below. A second and final contract time adjustment will then be done at the final acceptance of the project. An adjustment in the contract time due to adverse weather will not be cause for an adjustment in the contract amount. There will be no direct or indirect cost reimbursement for excess adverse weather days.

The following are anticipated adverse weather days that the contractor shall include in each month of his calendar day construction schedule.

January	10 days	May	5 days	September	4 days
February	9 days	June	6 days	October	3 days
March	8 days	July	6 days	November	7 days
April	7 days	August	5 days	December	7 days