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	MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65101 Phone (888) 275-6636
	BARTLETT & WEST 1719 Southridge Drive, Suite 100 Jefferson City, MO 65109 Certificate of Authority # 000167 Consultant Phone # (573) 634-3181
	If a seal is present on this sheet, JSP's have been electronically sealed and dated.
	JOB NO. J5S3284 Gasconade County, MO Date Prepared: 8/6/2021
Only the following items of the Job S seal: A, C & F	Special Provisions (Bridge) are authenticated by this

	MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65101 Phone (888) 275-6636
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	If a seal is present on this sheet, JSP's has been electronically sealed and dated.
	JOB NO. J5S3284 Maries & Osage Counties, MO Date Prepared: 8/6/2021
Only the following items of the Job Spe seal: B, D, E & G	cial Provisions (Bridge) are authenticated by this

	Job No:	J5S3284	J5S3284	J5S3284
	Route:	100	42	89
JOB SPECIAL PROVISIONS (BRIDGE)	County:	Gasconade	Maries	Osage

A. <u>CONSTRUCTION REQUIREMENTS</u> (Bridge A47351 – Gasconade 100)

1.0 Description. This provision contains general construction requirements for this project.

2.0 Construction Requirements. The plans and the asbestos and lead inspection report for the existing structure are included in the contract in the bridge electronic deliverables zip file for informational purposes only.

2.1 In order to assure the least traffic interference, the work shall be scheduled so that the bridge closure is for the absolute minimum amount of time required to complete the work. The bridge shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed bridge is opened to traffic.

2.2 Bridge work by contractor forces, including erection, rehabilitation or demolition, shall not be allowed over waterway traffic unless a bridge platform protection system is installed below the work area except for work performed above a deck that is intact. The protection system shall be capable of catching all falling objects such as tools, overhang brackets or materials. Lifting of objects that are heavier than the capacity of the bridge protection system shall not be permitted.

2.3 Qualified special mortar shall be a qualified rapid set concrete patching material in accordance with Sec 704. A qualified rapid set concrete patching material will not be permitted for half-sole repair, deck repair with void tube replacement, full depth repair, modified deck repair and substructure repair (formed) unless a note on the bridge plans specifies that a qualified special mortar may be used.

2.4 Provisions shall be made to prevent any debris and material from falling into the waterway. If determined necessary by the engineer, any debris and material that falls below the bridge outside the previously specified limits shall be removed as approved by the engineer at the contractor's expense. Waterway traffic under the bridge shall be maintained in accordance with the contract documents.

2.5 Any damage sustained to the remaining structure as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

2.6 Provisions shall be made to prevent damage to any existing utilities. Any damage sustained to the utilities as a result of the contractor's operations shall be the responsibility of the contractor. All costs of repair and disruption of service shall be as determined by the utility owners and as approved by the engineer.

2.7 A washer shall be required under head and nut when any reaming is performed for bolt installation.

2.8 SSPC-SP2 and SSPC-SP3 surface preparation shall be in accordance with the environmental regulations in Sec 1081 and collection of residue shall be in accordance with Sec 1081 for collection of blast residue. SSPC-SP6, SSPC-SP10 and SSPC-SP11 surface preparation shall be in accordance with the approved blast media and environmental regulations in Sec 1081 and collection of blast residue shall be in accordance with Sec 1081 and collection of blast media.

3.0 Coating Information.

3.1 Slab Drains and Stay-In-Place Forms. The stay-in-place forms, slab drains and slab drain brackets shall not be recoated, overcoated or damaged during the painting operation. Any portion of the slab drain bracket that is blast cleaned shall be recoated with System G. Any damage sustained as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

3.2 Existing Bridge Information. The informational plans may be used by bidders in determining the amount of steel to be cleaned and painted/coated with the full understanding that the State accepts no responsibility for accuracy of the estimated tons of existing steel shown in the table below. The bidder's acceptance and use of the estimate shown below shall be no cause for claim for any final adjustment in the contract unit price for the work involved in repainting. Each bidder is expected to carefully examine the structure, investigate the condition of existing paint and prepare their own estimate of quantities involved before submitting a bid. Surface preparation and applying field coatings to the structural steel shall be based on the contract plan quantities. No final measurements will be made.

	Estimated Tons				
Pridao	Coating	g System		Evicting Doint	Lood
No		Calcium		EXISTING Famil	Based
NO.	System G	Sulfonate	Total	System	Daseu
A47351	9	0	9	G (1995)	No

3.3 Environmental Contact. Environmental Section may be contacted at the below address or phone number. The Missouri Department of Health may be contacted at (573) 751-6102.

MoDOT - Design Division - Environmental Section P.O. Box 270 105 W. Capitol Ave., Jefferson City, MO 65102 Telephone: (573) 526-4778

3.4 Approved Smelter and Hazardous Waste Treatment, Storage and Disposal Facility. The following is the approved smelter and hazardous waste treatment, storage and disposal facility:

> Doe Run Company - Resource Recycling Division - Buick Facility Highway KK Boss, MO 65440 Telephone: (573) 626-4813

4.0 Navigation Requirements.

4.1 All work shall be performed so that the free flow of navigation is not unreasonably interfered with, the navigable depths are not impaired and navigation lighting is visible at all times. Any floating equipment or vessels working in the channel shall display lights and signals as required by the current "Handbook of Missouri Boating Laws and Responsibilities" available on the Missouri Water Patrol web site. If scaffolding or nets are suspended below low steel in the navigation span, the engineer shall be advised so that the temporary reductions in clearance for river traffic can be checked for reasonableness and appropriate notices can be published. Positive precautions shall be taken to prevent the accidental dropping of spark producing, flame

producing, lighted or damaging objects onto barges or vessels passing beneath the bridge. All flame cutting, welding or other similar spark producing operations shall be ceased over the channel when vessels are passing beneath the bridge.

4.2 The contractor shall be responsible for submitting a work plan to the engineer for review. When the engineer is in concurrence with the work plan, the engineer will forward the material to the appropriate agency or agencies for approval.

5.0 Method of Measurement. No measurement will be made.

6.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

B. <u>CONSTRUCTION REQUIREMENTS</u> (Br. A25501 – Maries 42 & Br. A14112 – Osage 89)

1.0 Description. This provision contains general construction requirements for this project.

2.0 Construction Requirements. The plans and the asbestos and lead inspection report for the existing structures are included in the contract in the bridge electronic deliverables zip file for informational purposes only.

2.1 In order to assure the least traffic interference on Maries County Route 42, the work shall be scheduled so that a lane closure is for the absolute minimum amount of time required to complete the work. A lane shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.

In order to assure the least traffic interference on Osage County Route 89, the work shall be scheduled so that the bridge closure is for the absolute minimum amount of time required to complete the work. The bridge shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed bridge is opened to traffic.

2.2 Bridge work by contractor forces, including erection, rehabilitation or demolition, shall not be allowed over traffic unless a bridge platform protection system is installed below the work area except for work performed above a deck that is intact. The protection system shall be capable of catching all falling objects such as tools, overhang brackets or materials. Lifting of objects that are heavier than the capacity of the bridge protection system shall not be permitted.

2.3 Qualified special mortar shall be a qualified rapid set concrete patching material in accordance with Sec 704. A qualified rapid set concrete patching material will not be permitted for half-sole repair, deck repair with void tube replacement, full depth repair, modified deck repair and substructure repair (formed) unless a note on the bridge plans specifies that a qualified special mortar may be used.

2.4 The existing slab for the bridge to be redecked was constructed as composite or non-composite as shown in the table below.

Bridge No.	Type of deck
A14112	Composite

2.5 Provisions shall be made to prevent any debris and material from falling into the waterway. If determined necessary by the engineer, any debris and material that falls below the bridge outside the previously specified limits shall be removed as approved by the engineer at the contractor's expense. Waterway traffic under the bridge shall be maintained in accordance with the contract documents.

2.6 Any damage sustained to the remaining structure as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

2.7 Provisions shall be made to prevent damage to any existing utilities. Any damage sustained to the utilities as a result of the contractor's operations shall be the responsibility of the contractor. All costs of repair and disruption of service shall be as determined by the utility owners and as approved by the engineer.

2.8 A washer shall be required under head and nut when any reaming is performed for bolt installation.

2.9 SSPC-SP2 and SSPC-SP3 surface preparation shall be in accordance with the environmental regulations in Sec 1081 and collection of residue shall be in accordance with Sec 1081 for collection of blast residue. SSPC-SP6, SSPC-SP10 and SSPC-SP11 surface preparation shall be in accordance with the approved blast media and environmental regulations in Sec 1081 and collection of blast residue shall be in accordance with Sec 1081 and collection of blast residue shall be in accordance with Sec 1081 and collection of blast residue shall be in accordance with Sec 1081 and collection of blast residue shall be in accordance with Sec 1081.

3.0 Coating Information.

3.1 Straps Removal. Exposed portions of straps for stay-in-place forms shall be removed prior to surface preparation. Straps need not be removed in areas that are not being painted. Flame cutting will not be permitted. The contractor shall exercise care not to damage the existing structure during removal. Any damage sustained to the remaining structure as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

3.2 Slab Drains and Stay-In-Place Forms. The stay-in-place forms, slab drains and slab drain brackets shall not be recoated, overcoated or damaged during the painting operation. Any portion of the slab drain bracket that is blast cleaned shall be recoated with System G. Any damage sustained as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

3.3 Existing Bridge Information. The informational plans may be used by bidders in determining the amount of steel to be cleaned and painted/coated with the full understanding that the State accepts no responsibility for accuracy of the estimated tons of existing steel shown in the table below. The bidder's acceptance and use of the estimate shown below shall be no cause for claim for any final adjustment in the contract unit price for the work involved in repainting. Each bidder is expected to carefully examine the structure(s), investigate the condition of existing paint and prepare their own estimate of quantities involved before submitting a bid. Surface preparation and applying field coatings to the structural steel shall be based on the contract plan quantities. No final measurements will be made.

	Estimated Tons				
Pridao	Coating System			Evicting Point	Lood
No.	System G	Calcium Sulfonate	Total	System	Based
A25501	11	0	11	S (Repaint) over Original A	Yes
A14112	13	0	13	S (Repaint) over Original A	Yes

3.4 Environmental Contact. Environmental Section may be contacted at the below address or phone number. The Missouri Department of Health may be contacted at (573) 751-6102.

MoDOT - Design Division - Environmental Section P.O. Box 270 105 W. Capitol Ave., Jefferson City, MO 65102 Telephone: (573) 526-4778

3.5 Approved Smelter and Hazardous Waste Treatment, Storage and Disposal Facility. The following is the approved smelter and hazardous waste treatment, storage and disposal facility:

> Doe Run Company - Resource Recycling Division - Buick Facility Highway KK Boss, MO 65440 Telephone: (573) 626-4813

4.0 Navigation Requirements.

4.1 All work shall be performed so that the free flow of navigation is not unreasonably interfered with, the navigable depths are not impaired and navigation lighting is visible at all times. Any floating equipment or vessels working in the channel shall display lights and signals as required by the current "Handbook of Missouri Boating Laws and Responsibilities" available on the Missouri Water Patrol web site. If scaffolding or nets are suspended below low steel in the navigation span, the engineer shall be advised so that the temporary reductions in clearance for river traffic can be checked for reasonableness and appropriate notices can be published. Positive precautions shall be taken to prevent the accidental dropping of spark producing, flame producing, lighted or damaging objects onto barges or vessels passing beneath the bridge. All flame cutting, welding or other similar spark producing operations shall be ceased over the channel when vessels are passing beneath the bridge.

4.2 The contractor shall be responsible for submitting a work plan to the engineer for review. When the engineer is in concurrence with the work plan, the engineer will forward the material to the appropriate agency or agencies for approval.

5.0 Method of Measurement. No measurement will be made.

6.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

JOB SPECIAL PROVISIONS (BRIDGE)

C. <u>BRIDGE-MOUNTED FISH TELEMETRY STATION</u> (Bridge A47351 – Gasconade 100)

1.0 Description. The contractor shall notify Dave Herzog at the Missouri Department of Conservation Southeast Regional office a minimum of 3 weeks prior to beginning work on the project. Mr. Herzog will coordinate with the contractor to determine if any removal or modification of the fish telemetry station is needed. The contractor is only responsible for contacting Mr. Herzog; any actual removal or modification of the fish telemetry station will be carried out by the Missouri Department of Conservation staff. Mr. Herzog's contact information is as follows:

Dave Herzog Big Rivers Science Unit Supervisor Missouri Department of Conservation Southeast Regional Office 2302 County Park Drive Cape Girardeau, MO 63701 Office (573) 290-5730 x: 4481 Cell (573) 225-1520 dave.herzog@mdc.mo.gov

2.0 Method of Measurement. No measurement will be made.

3.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

D. STREAM GAUGING STATION

(Br. A14112 – Osage 89)

1.0 Description. The contractor shall notify Eric "Scott" Southern at the Central Midwest Water Science Center a minimum of 3 weeks prior to beginning work on the project. Mr. Southern will coordinate with the contractor to determine if any removal or modification of the stream gauging station is needed. The contractor is only responsible for contacting Mr. Southern; any actual removal or modification of the stream gauging station will be carried out by the Central Midwest Water Science Center's staff. Mr. Southern's contact information is as follows:

Eric "Scott" Southern Supervisory Hydrologic Technician U.S. Geological Survey Central Midwest Water Science Center 1400 Independence Road Rolla, MO 65401 Office (573) 308-3767 Cell (573) 368-6527 southern@usgs.gov

2.0 Method of Measurement. No measurement will be made.

3.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

E. <u>DEFLECTION AND HAUNCHING</u> (Bridge A14112 –Osage 89)

1.0 Description. The contractor shall determine dead load deflections and haunching based on field measurements and/or existing bridge plans and these shall be adjusted based on the difference between the new and existing dead load weights.

2.0 Construction Requirements. In order to properly form the haunches for the new deck, the contractor shall survey top of deck elevations above each beam and girder including centerline of roadway and along each beam and girder line (top or bottom flange) prior to deck removal followed by surveying elevations of the beams and girders (top or bottom flange) after deck removal.

3.0 Method of Measurement. No measurement will be made.

4.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

F. <u>SELF-CONSOLIDATING CONCRETE</u> (Bridge A47351 – Gasconade 100)

1.0 Description. Self-Consolidating Concrete (SCC) is a specially designed concrete that enables the concrete to flow under the influence of its own weight and does not require mechanical vibration for consolidation. All material, proportioning, mixing and transporting of concrete shall be in accordance with Sec 501, except as specified herein.

2.0 Materials.

2.1 Aggregate. Fine and coarse aggregate shall be in accordance with Sec 1005, except that the requirements for gradation will not apply.

2.1.1 Gradation. The contractor shall submit the target gradation and allowable gradation range of each fraction of each aggregate source used in the mix design. During production, the contractor shall be within the allowable gradation range for each aggregate that was submitted.

2.1.2 Maximum Size. For SCC mixes, 100 percent of each fraction shall pass the ³/₄-inch sieve.

2.2 Admixture. All chemical admixtures shall be in accordance with section 1054, except as noted herein.

2.2.1 High Range Water Reducer. The polycarboxylate based high range water reducer shall be in accordance with AASHTO M 194, Type F or G. The high range water reducing admixture shall be added only after the concrete has reached the job site to reduce the potential for flash setting.

2.2.2 Viscosity Modifier. The viscosity-modifying admixture shall be evaluated according to the test methods and mix design proportions referenced in AASHTO M 194.

2.2.3 Combination. The self-consolidating admixture system shall consist of either a polycarboxylate based high range water-reducing admixture or a polycarboxylate based high range water reducer combined with a separate viscosity-modifying admixture.

3.0 Concrete Mix Design. At least 10 days prior to using SCC, the contractor shall submit a mix design for approval to Construction and Materials. The SCC mix shall be designed by absolute volume methods or an optimized mix design method such as Shilstone or other recognized optimization method.

3.1 Required Information. The mix design shall contain the following information:

(a) Source, type and specific gravity of Portland cement

(b) Source, type (class, grade, etc.) and specific gravity of supplementary materials, if used

(c) Source, name, type and amount of admixture

(d) Source, type (formation, etc.), ledge number if applicable, and gradation of the aggregate

(e) Specific gravity and absorption of each fraction in accordance with AASHTO T 85 for coarse aggregate and AASHTO T 84 for fine aggregate, including raw data

(f) Unit weight of each fraction in accordance with AASHTO T 19

(h) The design air content and target slump flow

(i) Batch weights of Portland cement and supplemental cementitious materials

(j) Batch weights of coarse, intermediate and fine aggregates

(k) Batch weight of water

3.2 Water Amount. The water per cementitious materials ratio shall meet the following requirements:

Water/Cementitious Materials Ratio	
Minimum	Maximum
0.32	0.45

3.3 Percent Fine Aggregate.The percent fine aggregate by absolute volume should range from 35 to 50 percent.

3.4 Minimum Cementitious Amount. The total amount of cementitious materials shall not be below 650 pounds per cubic yard.

3.5 Slump Flow. The slump flow test shall be performed in accordance with ASTM C 1611. The slump flow shall meet the following requirements:

Slump Flow (inches)		
Minimum	Maximum	
22	30	

3.6 Passing Ability. Passing ability of SCC shall be determined in accordance with ASTM C 1621 and shall not exceed 2 inches.

3.7 Visual Stability. The visual stability index rating shall be a maximum of 1.

3.8 Air Content. The minimum air content, when placed in the work, shall be 5.0 percent. Test shall be performed in accordance with AASHTO T 152.

3.9 Compressive Strength. Concrete shall have a 28-day minimum compressive strength of 4000 psi (28 MPa). Test shall be performed in accordance with AASHTO T 22.

4.0 Additional Information. The contractor shall submit a Batching Sequence Plan outlining how the SCC mix will be batched and mixed. The Batching Sequence Plan shall be submitted to the Engineer for approval.

5.0 Production. SCC mix shall not be used until the concrete mix and the Batching Sequence Plan have been approved. The SCC mix shall not vary from the mix design submitted for approval. Any changes in material sources, aggregate gradations, or material content shall require a new SCC mix be resubmitted for approval. Changes to the water content and chemical admixture dosages will be allowed to handle changes in environmental conditions.

5.1 Forms. SCC mixes generate higher fluid pressures than conventional concrete mixes. Forms shall be mortar-tight and capable of supporting the additional pressure.

5.2 Reinforcement. Reinforcement and other critical components shall be tightly secured in the form to prevent these items from shifting during concrete placement.

6.0 Quality Control. The quality of freshly mixed SCC may fluctuate, the contractor shall conduct air test, slump flow, visual stability index, and passing ability for every truck until consistent and compliant results are obtained. Subsequently, all testing shall be conducted in accordance with MoDOT specifications.

6.1 Slump Flow Requirement. The slump flow shall be within +/- 2 inches of the target slump flow designated by the contractor and shall not exceed 30 inches.

G. <u>CLEANING, LUBRICATING AND COATING EXISTING BEARINGS</u> (Br. A25501 – Maries 42 & Br. A14112 – Osage 89)

1.0 Description. This work shall consist of raising and supporting the existing beams and girders as required to inspect, clean, lubricate and coat existing bearings as specified on the plans and as directed by the engineer.

2.0 Construction Requirements.

2.1 Raising and Supporting the Superstructure. Before commencing operations, the contractor shall submit to the engineer for review the method and sequence of operation proposed to be used in performing this work. The contractor shall exercise caution when supporting the structural steel and shall raise the beams and girders the minimum extent

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necessary to perform this work. Raising the beams and girders at the bents and piers shall be done simultaneously to prevent any damage to the adjoining steel and concrete deck. The lifting operation shall be done only when authorized, but such authorization shall not relieve the contractor of responsibility for the safety of the operation or for damage to the structure. Any damage caused by the contractor's operations shall be repaired at the contractor's expense as approved by the engineer.

2.2 Bearing Inspection and Repair. After the structural members are supported, each bearing shall be inspected for deterioration. Any or all portions of the deteriorated bearings shall be replaced as determined by the engineer. When required to remove a bearing, removal of the bearing shall cause no damage to the existing anchor bolts in the concrete beam. Prior to removal or disassembly, all bearings shall be match marked for reassembly at ends of each piece by stamping an identification number in the metal with a steel stencil. All existing bearing material determined to be replaced shall be disposed of by the contractor in accordance with Sec 202.

2.3 Cleaning, Lubricating and Coating. Bearings shall be cleaned in accordance with Sec 1081. After cleaning and just prior to resetting the bearings, contact surfaces between the bearing pin and cradle shall be given a heavy coat of a graphite grease with a minimum of twenty percent graphite. After bearings are reset, the bearings shall receive a final cleaning and a prime coat. The final coat shall be applied when the existing structural steel is coated. Coating of bearings shall be as indicated for coating existing steel as specified in the contract documents.

3.0 Method of Measurement. Measurement for cleaning, lubricating and coating existing bearings will be made per each.

4.0 Basis of Payment. When required, payment for furnishing any new bearing material will be in accordance with Sec 109. Payment for the above described work, including all material, equipment, labor and any other incidental work necessary to complete this item, will be considered completely covered by the contract unit price for "Cleaning, Lubricating and Coating Bearing".

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- B. Deflection and Haunching
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JOB SPECIAL PROVISIONS (BRIDGE)

A. <u>CONSTRUCTION REQUIREMENTS</u>

1.0 Description. This provision contains general construction requirements for this project.

2.0 Construction Requirements. The plans and the asbestos and lead inspection report for the existing structure(s) are included in the contract in the bridge electronic deliverables zip file for informational purposes only.

2.1 In order to assure the least traffic interference, the work shall be scheduled so that the bridge closure is for the absolute minimum amount of time required to complete the work. The bridge shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed bridge is opened to traffic.

2.2 Qualified special mortar shall be a qualified rapid set concrete patching material in accordance with Sec 704. A qualified rapid set concrete patching material will not be permitted for half-sole repair, deck repair with void tube replacement, full depth repair, modified deck repair and substructure repair (formed) unless a note on the bridge plans specifies that a qualified special mortar may be used.

2.3 The existing slab for the bridge(s) to be redecked was constructed as composite or non-composite as shown in the table below.

Bridge No.	Type of deck
A14101	Composite

2.4 Provisions shall be made to prevent any debris and material from falling into the waterway. If determined necessary by the engineer, any debris and material that falls below the bridge outside the previously specified limits shall be removed as approved by the engineer at the contractor's expense.

2.5 Any damage sustained to the remaining structure as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

2.6 Provisions shall be made to prevent damage to any existing utilities. Any damage sustained to the utilities as a result of the contractor's operations shall be the responsibility of the contractor. All costs of repair and disruption of service shall be as determined by the utility owners and as approved by the engineer.

2.7 SSPC-SP2 and SSPC-SP3 surface preparation shall be in accordance with the environmental regulations in Sec 1081 and collection of residue shall be in accordance with Sec 1081 for collection of blast residue. SSPC-SP6, SSPC-SP10 and SSPC-SP11 surface preparation shall be in accordance with the approved blast media and environmental regulations in Sec 1081 and collection of blast residue shall be in accordance with Sec 1081.

3.0 Method of Measurement. No measurement will be made.

4.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

JOB SPECIAL PROVISIONS (BRIDGE)

B. <u>DEFLECTION AND HAUNCHING</u>

1.0 Description. The contractor shall determine dead load deflections and haunching based on field measurements and/or existing bridge plans and these shall be adjusted based on the difference between the new and existing dead load weights.

2.0 Construction Requirements. In order to properly form the haunches for the new deck, the contractor shall survey top of deck elevations above each beam including centerline of roadway and along each beam line (top or bottom flange) prior to deck removal followed by surveying elevations of the beams (top or bottom flange) after deck removal.

3.0 Method of Measurement. No measurement will be made.

4.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

C. <u>NON-DESTRUCTIVE TESTING</u>

1.0 Description. This work shall consist of performing non-destructive testing on the welds of all existing top flange cover plates.

2.0 Construction Requirements.

2.1 After the concrete deck is removed, the steel that is to remain will be inspected by the engineer. In addition to this inspection, the welds and adjacent base metal at the ends of the top cover plates shall have non-destructive (magnetic particle) testing performed. Non-destructive testing shall be performed by an acceptable testing agency. The contractor shall provide the engineer with documentation of the testing agency and the qualifications of personnel performing the testing. The documentation and qualifications shall be submitted to the State Bridge Engineer for acceptance. Personnel performing the tests shall be qualified for SNT-TC-1A Level II.

2.2 The length of weld to be tested and the base metal, one inch either side of the weld, shall be cleaned of all rust prior to the testing. On cover plates with square ends, the weld shall be tested one inch from each corner along the ends of the cover plate plus 6 inches back along the side from each corner of the plate. On cover plates with tapered ends, the weld shall be tested along the end of the cover plate, along tapered edges and 6 inches back along the cover plate from end of taper.

2.3 If fatigue cracks are found, the cracks are expected to be very small and may be located in the base metal at the toe of the welds. Any cracks discovered by testing, regardless of length, shall be marked and reported to the engineer. All repairs shall be made by a certified welder in accordance with Sec 712.6. Any repair work and retesting of the repair work required, as a result of this inspection, will be paid for in accordance with Sec 109. This shall not relieve the contractor from responsibility to repair any damage caused by this work at the contractor's expense. Any delay or inconvenience caused by this inspection requirement will be non-compensable and effect on time of performance non-excusable.

3.0 Method of Measurement. Measurement of non-destructive testing will be to the nearest linear foot. The extent of non-destructive testing may vary from the estimated quantities, but the contract unit price shall prevail regardless of the variation. Final measurements will not be made except for authorized changes during construction, or where appreciable errors are found in the

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contract quantity. The revision or correction will be computed and added to or deducted from the contract quantity.

4.0 Basis of Payment. Accepted quantities of non-destructive testing will be paid for at the contract unit price. Payment for the above described work, including all material, equipment, labor and any other incidental work necessary to complete this item, will be considered completely covered by the contract unit price for Non-Destructive Testing.