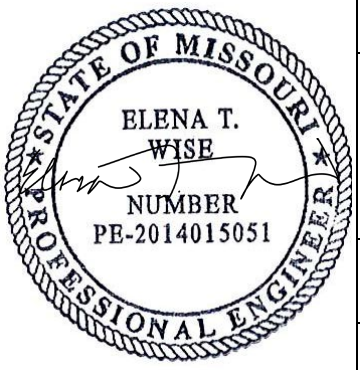
JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)

(Job Special Provisions shall prevail over General Special Provisions whenever in conflict therewith.)



MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 W. CAPITOL AVE.
JEFFERSON CITY, MO 65102
Phone 1-888-275-6636

CIVIL DESIGN, INC.
5220 Oakland Avenue
St. Louis, MO 63110
314-863-5570

Certificate of Authority: #2002006804
Expiration Date: December 31, 2026

If a seal is present on this sheet, JSP's have been electronically sealed and dated.

JOB NUMBER: J6I3650
COUNTY, MO: St. Charles, St. Louis, and City of St. Louis
DATE PREPARED: 9/12/2025

ADDENDUM DATE:
R001 October 27, 2025

Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: All

JOB
SPECIAL PROVISIONS

A. General - Federal JSP-09-02L

1.0 Description. The Federal Government is participating in the cost of construction of this project. All applicable Federal laws, and the regulations made pursuant to such laws, shall be observed by the contractor, and the work will be subject to the inspection of the appropriate Federal Agency in the same manner as provided in Sec 105.10 of the Missouri Standard Specifications for Highway Construction with all revisions applicable to this bid and contract.

1.1 This contract requires payment of the prevailing hourly rate of wages for each craft or type of work required to execute the contract as determined by the Missouri Department of Labor and Industrial Relations and requires adherence to a schedule of minimum wages as determined by the United States Department of Labor. For work performed anywhere on this project, the contractor and the contractor's subcontractors shall pay the higher of these two applicable wage rates. State Wage Rates, Information on the Required Federal Aid Provisions, and the current Federal Wage Rates are available on the Missouri Department of Transportation web page at www.modot.org under "Doing Business with MoDOT", "Contractor Resources". Effective Wage Rates will be posted 10 days prior to the applicable bid opening. These supplemental bidding documents have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

1.2 The following documents are available on the Missouri Department of Transportation web page at www.modot.org under "Doing Business with MoDOT"; "Standards and Specifications". The effective version shall be determined by the letting date of the project.

General Provisions & Supplemental Specifications

Supplemental Plans to July 2025 Missouri Standard Plans
For Highway Construction

These supplemental bidding documents contain all current revisions to the published versions and have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

B. Contract Liquidated Damages JSP-13-01D

1.0 Description. Liquidated Damages for failure or delay in completing the work on time for this contract shall be in accordance with Sec 108.8. The liquidated damages include separate amounts for road user costs and contract administrative costs incurred by the Commission.

2.0 Period of Performance. Prosecution of work is expected to begin on the date specified below in accordance with Sec 108.2. Regardless of when the work is begun on this contract, all work on all projects shall be completed on or before the date specified below. Completion by this date shall be in accordance with the requirements of Sec 108.7.1.

Notice to Proceed: December 1, 2025
Completion Date: December 1, 2027

2.1 Calendar Days and Completion Dates. Completion of the project is required as specified herein. The count of calendar days will begin on the date the contractor starts any construction operations on the project.

Job Number	Calendar Days	Daily Road User Cost
J6I3650	**N/A**	**$11,400**

3.0 Liquidated Damages for Contract Administrative Costs. Should the contractor fail to complete the work on or before the contract completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged contract administrative liquidated damages in accordance with Sec 108.8 in the amount of **$2,000** per calendar day for each calendar day, or partial day thereof, that the work is not fully completed. For projects in combination, these damages will be charged in full for failure to complete one or more projects within the specified contract completion date or calendar days.

4.0 Liquidated Damages for Road User Costs. Should the contractor fail to complete the work on or before the contract completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged road user costs in accordance with Sec 108.8 in the amount specified in Section 2.1 for each calendar day, or partial day thereof, that the work is not fully completed. These damages are in addition to the contract administrative damages and any other damages as specified elsewhere in this contract.

C. Work Zone Traffic Management JSP-02-06N

1.0 Description. Work zone traffic management shall be in accordance with applicable portions of Division 100 and Division 600 of the Standard Specifications, and specifically as follows.

1.1 Maintaining Work Zones and Work Zone Reviews. The Work Zone Specialist (WZS) shall maintain work zones in accordance with Sec 616.3.3 and as further stated herein. The WZS shall coordinate and implement any changes approved by the engineer. The WZS shall ensure all traffic control devices are maintained in accordance with Sec 616, the work zone is operated within the hours specified by the engineer, and will not deviate from the specified hours without prior approval of the engineer. The WZS is responsible to manage work zone delay in accordance with these project provisions. When requested by the engineer, the WZS shall submit a weekly report that includes a review of work zone operations for the week. The report shall identify any problems encountered and corrective actions taken. Work zones are subject to unannounced inspections by the engineer and other departmental staff to corroborate the validity of the WZS's review and may require immediate corrective measures and/or additional work zone monitoring.

1.2 Work Zone Deficiencies. Failure to make corrections on time may result in the engineer suspending work. The suspension will be non-excusable and non-compensable regardless if road user costs are being charged for closures.

2.0 Traffic Management Schedule.

2.1 Traffic management schedules shall be submitted to the engineer for review prior to the start of work and prior to any revisions to the traffic management schedule. The traffic management schedule shall include the proposed traffic control measures, the hours traffic control will be in place, and work hours.

2.2 The traffic management schedule shall conform to the limitations specified in Sec 616 regarding lane closures, traffic shifts, road closures and other width, height and weight restrictions.

2.3 The engineer shall be notified as soon as practical of any postponement due to weather, material or other circumstances.

2.4 In order to ensure minimal traffic interference, the contractor shall schedule lane closures for the absolute minimum amount of time required to complete the work. Lanes 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.

2.5 Traffic Congestion. The contractor shall, upon approval of the engineer, take proactive measures to reduce traffic congestion in the work zone. The contractor shall immediately implement appropriate mitigation strategies whenever traffic congestion reaches an excess of **15 minutes** to prevent congestion from escalating beyond this delay threshold. If disruption of the traffic flow occurs and traffic is backed up in queues equal to or greater than the delay time threshold listed above, then the contractor shall immediately review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent the queues from reoccurring. Traffic delays may be monitored by physical presence on site or by utilizing real-time travel data through the work zone that generate text and/or email notifications where available. The engineer monitoring the work zone may also notify the contractor of delays that require prompt mitigation. The contractor may work with the engineer to determine what other alternative solutions or time periods would be acceptable. When a Work Zone Analysis Spreadsheet is provided, the contractor will find it in the electronic deliverables on MoDOT's Online Plans Room. The contractor may refer to the Work Zone Analysis Spreadsheet for detailed information on traffic delays.

2.5.1 Traffic Safety.

2.5.1.1 Recurring Congestion. Where traffic queues routinely extend to within 1000 feet of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet of the ROAD WORK AHEAD, or similar, sign on an undivided highway, the contractor shall extend the advance warning area, as approved by the engineer.

2.5.1.2 Non-Recurring Congestion. When traffic queues extend to within 1000 feet of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet of the ROAD WORK AHEAD, or similar, sign on an undivided highway infrequently, the contractor shall deploy a means of providing advance warning of the traffic congestion, as approved by the engineer. The warning location shall be no less than 1000 feet and no more than 0.5 mile in advance of the end of the traffic queue on divided highways and no less than 500 feet and no more than 0.5 mile in advance of the end of the traffic queue on undivided highways.

2.6 Transportation Management Plan. The contractor Work Zone Specialist (WZS) shall review the Transportation Management Plan (TMP), found as an electronic deliverable on

MoDOT's Online Plans Room and discuss the TMP with the engineer during the preconstruction conference. Throughout the construction project, the WZS is responsible for updating any changes or modifications to the TMP and getting those changes approved by the engineer a minimum of two weeks in advance of implementation. The WZS shall participate in the post construction conference and provide recommendations on how future TMPs can be improved.

2.7 Traffic Management Center (TMC) Coordination. The Work Zone Specialist (WZS) or their designee shall contact by phone the MoDOT Traffic Management Center (Gateway Guide TMC at #314-275-1513) within five minutes of a lane or ramp closure beginning and within five minutes of a lane or ramp closure being removed. The WZS shall make this phone call 24 hours a day, 365 days of the year since the MoDOT Traffic Management Centers are always staffed.

3.0 Work Hour Restrictions.

3.1 Except for emergency work, as determined by the engineer, and long term lane closures required by project phasing, all lanes shall be scheduled to be open to traffic during the five major holiday periods shown below, from 12:00 noon on the last working day preceding the holiday until 6:00 a.m. on the first working day subsequent to the holiday unless otherwise approved by the engineer.

Memorial Day
Labor Day
Thanksgiving
Christmas
New Year's Day

3.1.1 Independence Day. The lane restrictions specified in Section 3.1 shall also apply to Independence Day, except that the restricted periods shall be as follows:

- 12:00 noon Friday, July 3, 2026 – 6:00 a.m. Monday, July 6, 2026
- 12:00 noon Friday, July 2, 2027 – 6:00 a.m. Monday, July 6, 2027

3.1.2 Except for emergency work, as determined by the engineer, and long term lane closures required by project phasing, the contractor's working hours will be restricted for the Special Events as shown below. All lanes shall be scheduled to be open to traffic during these Special Events.

Special events of regional significance during the duration of this project, such as specific sporting events (St. Louis Cardinals and St Louis Blues home games), events at Forest park, Tower Grove Park, or Grand Center, parades, marathons, concerts and other major St. Louis events such as the Susan G. Komen Race for the Cure, Forest Park Balloon Glow, Moonlight Ramble, and Fair St. Louis. The Engineer will advise the contractor of any such events and how they are to be handled. All lanes shall be scheduled to be open to traffic 3 hours before the event until 2 hours following the end of the event, or at the direction of the Engineer.

3.2 The contractor shall not perform any construction operation on the roadway, roadbed or active lanes, including the hauling of material within the project limits, during restricted periods, holiday periods or other special events specified in the contract documents.

3.3 The contractor shall be aware that traffic volume data indicates construction operations on the roadbed between the following hours will likely result in traffic queues greater than 15

minutes. Based on this, the contractor's operations will be restricted accordingly unless it can be successfully demonstrated the operations can be performed without a 15 minute queue in traffic. It shall be the responsibility of the engineer to determine if the above work hours may be modified. The contractor's work zone (WZ) operations will be allowed under the temporary traffic control parameters shown in the following tables:

	County	Route	Dir	Location	Location	*Single Lane Drop* Day WZ Hrs	*Shoulder Lane Drop* Day WZ Hrs	*Single Lane Drop* Night WZ Hrs	*Shoulder Lane Drop* Night WZ Hrs	*Double Lane Drop* Night WZ Hrs	*Single Lane Drop* Weekend Day WZ Hrs	*Double Lane Drop* Weekend Night WZ Hrs	*MoDOT Traffic Engineer*
I-64	St. Louis Co.	I-64	WB	Missouri River Bridge	Chesterfield Pkwy	5am – 3pm	No Restrictions	7pm – 9am	No Restrictions	11pm-5am	No Work 12pm – 5pm	10pm-9am	*Joe Mulnik & Rob Meyer*
	St. Louis Co.	I-64		Chesterfield Pkwy	I-270	5am – 3pm	No Restrictions	6pm – 9am	No Restrictions	8pm-6am	No Work 1pm – 6pm	6pm-10am	*Joe Mulnik & Rob Meyer*
	St. Louis Co.	I-64		I-270	Ballas Rd	Wkd 5am – 3pm Wk Day Not allowed	No Restrictions	9pm – 6am	No Restrictions	1am-4am	Sun 7pm – 9am/Sat 8pm 7am	12am-5am	*Joe Mulnik & Rob Meyer*
I-64	St. Louis Co.	I-64	EB	Missouri River Bridge	Chesterfield Pkwy	Not allowed	No Restrictions	6pm – 9am	No Restrictions	10pm-5am	No Work 3pm – 5pm	10pm-5am	*Joe Mulnik & Rob Meyer*
	St. Louis Co.	I-64		Chesterfield Pkwy	Maryville Centre Dr.	Not allowed	No Restrictions	8pm – 6am	No Restrictions	12am-4am	Sun 6pm – 10am/Sat 6pm - 10am	Sun 12am – 5am/Sat 11pm - 5am	*Joe Mulnik & Rob Meyer*
	St. Louis Co.	I-64		Maryville Centre Dr.	I-270	Not allowed	No Restrictions	6pm – 10am	No Restrictions	8pm-6am	Sun 6pm – 10am/Sat N o Work 3pm - 5pm	6pm-6am	*Joe Mulnik & Rob Meyer*
1 ADDED													
I-64	St. Louis Co.	I-64	WB	I-270	Ballas Rd	5am – 3pm	No Restrictions	8pm – 6am	No Restrictions	12am-4am	Sun 6pm – 9am/Sat 7pm 6am	11pm-5am	*Joe Mulnik & Rob Meyer*
	St. Louis Co.	I-64		Ballas Rd	McCutcheon Rd	5am – 3pm	No Restrictions	7pm – 5am	No Restrictions	9pm-4am	Sun No Work 12pm – 5pm/Sat wk hrs7pm - 11am	Sun 6pm – 9am/Sat 8pm 6am	*Joe Mulnik & Rob Meyer*
	St. Louis Co./City	I-64		Brentwood Blvd	Skinker Blvd	Wkd 5am – 3pm Wk Day not allowed	No Restrictions	9pm – 6am	No Restrictions	1am-4am	Sun 7pm – 9am/Sat 8pm 6am	Sun 6pm – 6am/Sat 12am - 4am	*Joe Mulnik & Rob Meyer/Yan Gluzman*
I-64	St. Louis Co. /City	I-64	EB	Skinker Blvd	Big Bend	Not allowed	No Restrictions	7pm – 9am	No Restrictions	1am - 4am	Sun 7pm – 9am/Sat 8pm 9am	Sun 12am – 5am/Sat 1am - 4am	*Joe Mulnik & Rob Meyer/Yan Gluzman*
	St. Louis Co.	I-64		Big Bend	Hanley Rd	Not allowed	No Restrictions	6pm – 9am	No Restrictions	6pm-9am	Sun No Work 3pm – 5pm/Sat wk hrs6pm - 11am	Sun 7pm – 8am/Sat 8pm 8am	*Joe Mulnik & Rob Meyer*
	St. Louis Co.	I-64		Hanley Rd	Brentwood Blvd	Not allowed	No Restrictions	9pm – 5am	No Restrictions	1am - 4am	Sun 7pm – 9am/Sat 8pm 7am	Sun 12am – 5am/Sat 12am - 4am	*Joe Mulnik & Rob Meyer*
I-64	St. Louis City	I-64	EB	Skinker Rd	Boyle Ave	9am-3pm	No Restrictions	7pm - 6am	No Restrictions	7pm - 6am	Sun 5pm – 12pm/Sat 6pm - 11am	Sun 7pm – 6am/Sat 8pm 6am	*Yan Gluzman*
	St. Louis City	I-64	WB	Skinker Rd	Boyle Ave	9am-3pm	No Restrictions	7pm – 8am	No Restrictions	6pm - 10am	Sun No Restrictions Sat No Work 12pm-6pm	7pm - 6am	*Yan Gluzman*
	St. Louis City	I-64	EB	Boyle Ave	Jefferson Ave	9am-3pm	No Restrictions	7pm – 7am		10pm - 5am	Sun No Work 3pm – 5pm/Sat wk hrs6pm - 9am	12am - 5am	
	St. Louis City	I-64	WB	Boyle Ave	Jefferson Ave	9am-3pm	No Restrictions	7pm – 9am	No Restrictions	12am -5am	Sun No Work1pm – 6pm/Sat wk hrs6pm - 10am	12am -5am	

	County	Route	Dir	Location	Location	*Single Lane Drop* Day WZ Hrs	*Shoulder Lane Drop* Day WZ Hrs	*Single Lane Drop* Night WZ Hrs	*Shoulder Lane Drop* Night WZ Hrs	*Double Lane Drop* Night WZ Hrs	*Single Lane Drop* Weekend Day WZ Hrs	*Double Lane Drop* Weekend Night WZ Hrs	*MoDOT Traffic Engineer*
I-170	SW SL Co.	I-170	WB	Galleria	Route D	9am-2pm	No Restrictions	8pm– 7am	8pm– 7am	12am - 5am	6pm – 10am	7pm - 5am	*Joe Mulnik & Rob Meyer*
	SW SL Co.	I-170	EB	Galleria	Route D	9am-2pm	No Restrictions	8pm – 6am	Wkd 6pm-7am Wk Day 8pm – 6am	12am - 5am	Sun 7pm – 7am/Sat 6pm 11am	12am - 5am	
	North SL Co.	I-170	WB	Route D	Route 180	9am - 1pm	No Restrictions	No Work 1pm - 6pm	No Restricitons	7pm -8am	No Restrictions	7pm - 9am	
I-170	North SL Co.	I-170	EB	Route D	Route 180	8am-3pm	No Restrictions	No Restrictions	No Restrictions	7pm - 7am	No Restrictions	9pm - 5am	*Yan Gluzman*
	North SL Co.	I-170	WB	Route 180	Route 115	8am-3pm	No Restrictions	No Restrictions	No Restrictions	7pm - 7am	No Restrictions	9pm - 5am	*Yan Gluzman*
	North SL Co.	I-170	EB	Route 180	Route 115	9am - 2pm		6pm - 10am		8pm - 6am	Sun No Restriction Sat No Work 3pm - 5pm	7pm - 7am	*Yan Gluzman*
	North SL Co.	I-170	WB	Route 115	I-70	9am - 2pm		10pm – 5am		N/A	10pm –6am	7pm - 7am	*Yan Gluzman*
	North SL Co.	I-170	EB	I-70	Scudder Rd	9am-2pm	No Restrictions	9pm-6am	No Restrictions	6pm - 9am	10pm – 6am	7pm - 7am	
	North SL Co.	I-170	WB	Scudder Rd	I-270	8am-3pm	No Restrictions	10pm – 6am	10pm – 6am	N/A	9pm-7am	7pm - 7am	*Yan Gluzman*
	North SL Co.	I-170	EB	Scudder Rd	Airport Rd	8am-3pm	No Restrictions	No Restrictions	No Restrictions	6pm -10am	9pm-7am	7pm - 7am	
	North SL Co.	I-170	EB	Airport Rd	I-270	8am-3pm	No Restrictions	7pm –7am	7pm –7am	7pm - 7am	Sun No Restriction Sat No Work 6pm - 10am	11pm - 5am	*Yan Gluzman*

3.4 Any work requiring a reduction in the number of through lanes of traffic shall be completed during nighttime hours. Nighttime hours shall be defined as shown in the table above for various locations on I-64 and I-170.

3.5 The contractor shall not alter the start time, ending time, or a reduction in the number of through lanes of traffic or ramp closures without advance notification and approval by the engineer. The only work zone operation approved to begin 30 minutes prior to a reduction in through traffic lanes or ramp closures is the installation of traffic control signs. Should lane closures be placed or remain in place, prior to the approved starting time or after the approved ending time, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delays, with a resulting cost to the traveling public. These damages are not easily computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of **$1,000 per 15 minute increment** for each 15 minutes that the temporary lane closures are in place and not open to traffic in excess of the limitation as specified elsewhere in this special provision. It shall be the responsibility of the engineer to determine the quantity of unapproved closure time.

3.5.1 The said liquidated damages specified will be assessed regardless if it would otherwise be charged as liquidated damages under the Missouri Standard Specification for Highway Construction, as amended elsewhere in this contract.

4.0 Detours and Lane Closures.

4.1 When a changeable message sign (CMS) is provided, the contractor shall use the CMS to notify motorists of future traffic disruption and possible traffic delays one week before traffic is shifted to a detour or prior to lane closures. The CMS shall be installed at a location as approved or directed by the engineer. If a CMS with Communication Interface is required, then the CMS shall be capable of communication prior to installation on right of way. All messages planned for use in the work zone shall be approved and authorized by the engineer or its designee prior to deployment. When permanent dynamic message signs (DMS) owned and operated by MoDOT are located near the project, they may also be used to provide warning and information for the work zone. Permanent DMS shall be operated by the TMC, and any messages planned for use on DMS shall be approved and authorized by the TMC at least 72 hours in advance of the work.

4.2 At least one lane of traffic in each direction shall be maintained at all times except for brief intervals of time required when the movement of the contractor's equipment will seriously hinder the safe movement of traffic. Periods during which the contractor will be allowed to interrupt traffic will be designated by the engineer.

4.3 Overhead Sign Structure Removal. The contractor shall remove the existing overhead sign structures identified for removal during allowable nighttime work zone hours as outlined above.

5.0 Basis of Payment. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials, or time required to fulfill the above provisions, unless specified elsewhere in the contract document. All authorized changes in the traffic control plan shall be provided for as specified in Sec 616.

D. Emergency Provisions and Incident Management JSP-90-11A

1.0 The contractor shall have communication equipment on the construction site or immediate access to other communication systems to request assistance from law enforcement or other emergency agencies for incident management. In case of traffic accidents or the need for law enforcement to direct or restore traffic flow through the job site, the contractor shall notify law enforcement or other emergency agencies immediately as needed. The area engineer's office shall also be notified when the contractor requests emergency assistance.

2.0 In addition to the 911 emergency telephone number for ambulance, fire or law enforcement services, the following agencies may also be notified for accident or emergency situation within the project limits.

Missouri Highway Patrol: 573-751-3313
St. Charles County Chief of Police: 636-949-3000
St. Louis Chief of Police: 314-444-5309

St. Louis County Chief of Police: 314-615-4260		
City of St. Louis	Fire: 314-533-3406	Police: 314-444-5309

2.1 This list is not all inclusive. Notification of the need for wrecker or tow truck services will remain the responsibility of the appropriate law enforcement agency.

2.2 The contractor shall notify law enforcement and emergency agencies before the start of construction to request their cooperation and to provide coordination of services when emergencies arise during the construction at the project site. When the contractor completes this notification with law enforcement and emergency agencies, a report shall be furnished to the engineer on the status of incident management.

3.0 No direct pay will be made to the contractor to recover the cost of the communication equipment, labor, materials or time required to fulfill the above provisions.

E. Project Contact for Contractor/Bidder Questions JSP-96-05A

1.0 All questions concerning this project during the bidding process shall be forwarded to the project contact listed below.

Jamie Rana, PE, Project Contact
MoDOT, St. Louis District
1590 Woodlake Drive
Chesterfield, MO 63017

Telephone Number: 314-624-5035 (mobile)
Email: Jamie.Rana@modot.mo.gov

1.1 All questions concerning the bid document preparation can be directed to the Central Office – Design as listed below.

Telephone Number: (573) 751-2876
Email: BCS@modot.mo.gov

2.0 Upon award and execution of the contract, the successful bidder/contractor shall forward all questions and coordinate the work with the engineer listed below:

John Lewis, Resident Engineer
MoDOT, St. Louis District
1590 Woodlake Drive
Chesterfield, MO 63017

314-370-9904
john.lewis@modot.mo.gov

F. DBE Prompt Payment Reporting JSP-24-05B

1.0 Description.

1.1 This provision will only apply to contracts that have a Disadvantaged Business Enterprise (DBE) goal greater than 0% and have at least one DBE subcontractor.

1.2 MoDOT monitors the payments made by prime contractors and subcontractors to DBEs for compliance with DBE payment monitoring rules as outlined in 49 CFR 26.37. To facilitate this monitoring, MoDOT requires prime contractors to report their remitted payments to DBEs and subcontractors to report their remitted payments to lower-tier DBEs.

1.3 Tracking of DBE payments are made through the Signet™ application (Signet). Signet is a third-party service, supported by the vendor, for usage by the prime contractor and all subcontractors. Signet is only a reporting tool; it does not process financial transactions. MoDOT does not provide direct technical support for Signet. Information about Signet may be found at https://signet-help.zendesk.com/hc/en-us.

1.4 Upon completion of the first pay estimate on the contract, Signet will automatically send an email to the prime contractor prompting registration. The prime will be required to pay a one-time, fixed fee of $1,000 for this contract directly to the Signet vendor. Use of Signet to track DBE payments will be available for the life of the contract, regardless of the contract value, contract duration, number of subcontractors, or payments reported. No additional fee will be charged to subcontractors that are required to report payments or DBEs that are required to verify payments through Signet. The contractor may also, at no additional cost, report payments through Signet to subcontractors that are not DBEs.

1.5 After each estimate, when contractor reporting of payments is complete, the subcontractor will receive an email notifying them of the payment and requesting verification of the reported payment. A subcontractor that has not completed registration with Signet will be prompted to do so at this time.

1.6 Users will be set up automatically based on information in MoDOT's vendor list. Additional users under each contractor may be added once registration has been completed within Signet. The current vendor list can be found at https://www.modot.org/bid-opening-info.

1.7 For purposes of this requirement, payer is defined as the prime contractor or subcontractor that reports a payment in Signet to a vendor that is either a subcontractor, trucker, manufacturer, regular dealer, or broker. Payee is defined as the vendor that receives notification of payment through Signet from the prime contractor or a higher-tier subcontractor. Payment is defined as issuing an Electronic Funds Transfer (EFT) or mailing a check to a payee.

2.0 Requirements. Payers must report remitted payment to DBEs within Signet, for work performed by the DBE subcontractor, DBE trucking, materials supplied from a DBE manufacturer, dealer, or broker, as well as a return of retainage (and/or other amounts withheld), within 15 calendar days.

2.1 Prime contractors must report remitted payments to DBEs within 15 calendar days of each payment it receives from MoDOT. Prime contractors must also report payments to non-DBE

subcontractors if that subcontractor is making payment to a lower tier DBE subcontractor, trucker, manufacturer, regular dealer, or broker.

2.2 The payer must report the following information within Signet:

a. The name of the payee.
b. The dollar amount of the payment to the payee.
c. The date the payment was made.
d. Any retainage or other amount withheld (if any) and the reason for the withholding (if other than retainage).
e. The DBE function performed for this payment (e.g., contracting, trucking, or supplying as a manufacturer, dealer, or broker).
f. Other information required by Signet.

The payer must report its return of retainage (and/or other amounts withheld) in separate, standalone payment entries (i.e., without being comingled with a payment for work performed or materials supplied).

2.3 In the event that no work has been completed by a DBE during the estimate period, such that no payment is due to a DBE subcontractor, trucker, manufacturer, regular dealer, or broker, then the prime contractor will mark payment complete within Signet, and no other payments are required to be reported.

2.4 Each subcontractor making a payment to a lower-tier DBE must report remitted payments within Signet, as detailed in Section 2.2, within 15 days of receipt of each payment from the prime contractor.

2.5 DBE payees must verify in Signet each payment reported by a payer within 15 calendar days of the payment being reported by the payer. This verification includes whether the payment was received, and if so, whether it was as expected.

3.0 Basis of Payment. A fixed cost of $1,000 will be paid on this contract for the required software to report payments to DBEs through Signet. Regardless of the number of projects in a contract, a single payment will be made under item 108-10.00, SIGNET DBE REPORTING, per lump sum. The engineer reserves the right to underrun this item for any reason. Any additional costs for registration, software, usage, time, labor, or other costs will be considered incidental and no direct payment will be made.

G. Contractor Quality Control NJSP-15-42

1.0 The contractor shall perform Quality Control (QC) testing in accordance with the specifications and as specified herein. The contractor shall submit a Quality Control Plan (QC Plan) to the engineer for approval that includes all items listed in Section 2.0, prior to beginning work.

2.0 Quality Control Plan.

(a) The name and contact information of the person in responsible charge of the QC testing.
(b) A list of the QC technicians who will perform testing on the project, including the fields in which they are certified to perform testing.
(c) A proposed independent third party testing firm for dispute resolution, including all contact information.
(d) A list of Hold Points, when specified by the engineer.
(e) The MoDOT Standard Inspection and Testing Plan (ITP). This shall be the version that is posted at the time of bid on the MoDOT website (www.modot.org/quality).

3.0 Quality Control Testing and Reporting. Testing shall be performed per the test method and frequency specified in the ITP. All personnel who perform sampling or testing shall be certified in the MoDOT Technician Certification Program for each test that they perform.

3.1 Reporting of Test Results. All QC test reports shall be submitted as soon as practical, but no later than the day following the test. Test data shall be immediately provided to the engineer upon request at any time, including prior to the submission of the test report. No payment will be made for the work performed until acceptable QC test results have been received by the engineer and confirmed by QA test results.

3.1.1 Test results shall be reported on electronic forms provided by MoDOT. Forms and Contractor Reporting Excel2Oracle Reports (CRE2O) can be found on the MoDOT website. All required forms, reports and material certifications shall be uploaded to a Microsoft SharePoint® site provided by MoDOT, and organized in the file structure established by MoDOT.

3.2 Non-Conformance Reporting. A Non-Conformance Report (NCR) shall be submitted by the contractor when the contractor proposes to incorporate material into the work that does not meet the testing requirements or for any work that does not comply with the contract terms or specifications.

3.2.1 Non-Conformance Reporting shall be submitted electronically on the Non-Conformance Report form provided on the MoDOT Website. The NCR shall be uploaded to the MoDOT SharePoint® site and an email notification sent to the engineer.

3.2.2 The contractor shall propose a resolution to the non-conforming material or work. Acceptance of a resolution by the engineer is required before closure of the non-conformance report.

4.0 Work Planning and Scheduling.

4.1 Two-week Schedule. Each week, the contractor shall submit to the engineer a schedule that outlines the planned project activities for the following two-week period. The two-week schedule shall detail all work and traffic control events planned for that period and any Hold Points specified by the engineer.

4.2 Weekly Meeting. When work is active, the contractor shall hold a weekly project meeting with the engineer to review the planned activities for the following week and to resolve any outstanding issues. Attendees shall include the engineer, the contractor superintendent or project manager and any foreman leading major activities. This meeting may be waived when, in the opinion of the engineer, a meeting is not necessary. Attendees may join the meeting in person, by phone or video conference.

4.3 Pre-Activity Meeting. A pre-activity meeting is required in advance of the start of each new activity, except when waived by the engineer. The purpose of this meeting is to review construction details of the new activity. At a minimum, the discussion topics shall include: safety precautions, QC testing, traffic impacts, and any required Hold Points. Attendees shall include the engineer, the contractor superintendent and the foreman who will be leading the new activity. Pre-activity meetings may be held in conjunction with the weekly project meeting.

4.4 Hold Points. Hold Points are events that require approval by the engineer prior to continuation of work. Hold Points occur at definable stages of work when, in the opinion of the engineer, a review of the preceding work is necessary before continuation to the next stage.

4.4.1 A list of typical Hold Point events is available on the MoDOT website. Use of the Hold Point process will only be required for the project-specific list of Hold Points, if any, that the engineer submits to the contractor in advance of the work. The engineer may make changes to the Hold Point list at any time.

4.4.2 Prior to all Hold Point inspections, the contractor shall verify the work has been completed in accordance with the contract and specifications. If the engineer identifies any corrective actions needed during a Hold Point inspection, the corrections shall be completed prior to continuing work. The engineer may require a new Hold Point to be scheduled if the corrections require a follow-up inspection. Re-scheduling of Hold Points require a minimum 24-hour advance notification from the contractor unless otherwise allowed by the engineer.

5.0 Quality Assurance Testing and Inspection. MoDOT will perform quality assurance testing and inspection of the work, except as specified herein. The contractor shall utilize the inspection checklists provided in the ITP as a guide to minimize findings by MoDOT inspection staff. Submittal of completed checklists is not required, except as specified in 5.1.

5.1 Inspection and testing required in the production of concrete for the project shall be the responsibility of the contractor. Submittal of the 501 Concrete Plant Checklist is required.

6.0 Basis of Payment. No direct payment will be made for compliance with this provision.

H. Utility Coordination

1.0 For informational purposes only, the following is a list of names, addresses, and telephone numbers of the known utility companies in the area of the construction work for this improvement:

Utility Name	**Known Required Adjustment**	**Type**
Ameren Missouri Construction Hotline Phone: (866) 992-6619 Email: constructionhotline@ameren.com	None	Power

Lumen Rich Obremski Phone: (314) 378-9931 Email: Richard.Obremski@Lumen.com	None	Communications
MoDOT - ITS Anna Privitt Phone: (314) 624-7466 Email: Anna.Privitt@modot.mo.gov	None	Communications

1.1 The Contractor shall be aware there are numerous utilities present along the routes in this contract. Utility locates were not performed during the design phase of the project. Utility investigation was only preformed during the design phase of the project for the new **cantilever box truss 6051 located on Plan Sheet 098, and overhead box truss 6056 on Plan Sheet 100**. The above utilities were identified through the Missouri One-Call system as having facilities within the project area at these specific locations. Therefore, the extent of conflicts with utilities are unknown. It is the inherent risk of the work under this contract that the contractor may encounter these utilities above and/or below the ground or in the vicinity of any given work item which may interfere with their operations. The contractor expressly acknowledges and assumes this risk even though the nature and extent are unknown to both the contractor and the Commission at the time of bidding and award of the contract. It is, therefore, the responsibility of the contractor to comply with Missouri CSR 319 to get utilities marked and verify the existence, location, and status of any marked utility prior to any excavations. Such verification may require direct contact with the listed utilities.

2.0 **Lumen and Potential conflict with Box Truss 6051.** Lumen advises that they have buried fiber facilities located on the east side of Interstate 170 within the project limits. This line historically was installed outside of the utility corridor and the contractor shall take necessary precautions and measures to verify locations of Lumen's fiber line and to protect in place their existing facilities during construction. As-Built maps and One-Call locates place the Line outside of conflict with Truss 6051 at the proposed location. Records indicate that the line moves into line with the current foundation approximately 30' north of its current location. Lumen advised that they do not anticipate any conflicts with their facilities.

3.0 Guardrail, guard cable, and groundmount post locations. The contractor shall be aware there are numerous utilities present along the route in this contract. The full extent of conflicts with utilities are unknown. There may be underground utilities that run parallel or cross the route that are in close proximity to proposed work locations. It is, therefore, the responsibility of the contractor to comply with Missouri CSR 319 to get utilities marked and verify the existence, location, and status of any marked utility prior to any excavations. The contractor shall take necessary precautions and measures to verify locations and depths of utilities by any necessary means to determine exact impacts to their work and may require direct contact with the listed utilities.

4.0 Utility conflicts not noted. If utility facilities are found to be in conflict with the contract work that aren't noted on the plans or in the Job Special Provisions, the Contractor shall contact the MoDOT Area **Utility Coordinator Michael Quadrini at (314) 648-4079.** District Utility Staff will determine whether adjustment of the utility is necessary, if alternate construction methods

will be required, or if the work can be installed in accordance with Missouri Standard Plans for Highway Construction for the item of work specified.

5.0 Basis of Payment. No direct payment shall be made for compliance with this provision unless specified elsewhere in the contract document.

I. Supplemental Revisions JSP-18-01JJ

- Compliance with 2 CFR 200.216 – Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment.

The Missouri Highways and Transportation Commission shall not enter into a contract (or extend or renew a contract) using federal funds to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as substantial or as critical technology as part of any system where the video surveillance and telecommunications equipment was produced by Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

- Stormwater Compliance Requirements

1.0 Description. This provision requires the contractor to provide a Water Pollution Control Manager (WPCM) for any project that includes land disturbance on the project site and the total area of land disturbance, both on the project site, and all Off-site support areas, is one (1) acre or more. Regardless of the area of Off-site disturbance, if no land disturbance occurs on the project site, these provisions do not apply. When a WPCM is required, all sections within this provision shall be applicable, including assessment of specified Liquidated Damages for failure to correct Stormwater Deficiencies, as specified herein. This provision is in addition to any other stormwater, environmental, and land disturbance requirements specified elsewhere in the contract.

1.1 Definitions. The project site is defined as all areas designated on the plans, including temporary and permanent easements. The project site is equivalent to the "permitted site", as defined in MoDOT's State Operating Permit. An Off-site area is defined as any location off the project site the contractor utilizes for a dedicated project support function, such as, but not limited to, staging area, plant site, borrow area, or waste area.

1.2 Reporting of Off-Site Land Disturbance. If the project includes any planned land disturbance on the project site, prior to the start of work, the contractor shall submit a written report to the engineer that discloses all Off-site support areas where land disturbance is planned, the total acreage of anticipated land disturbance on those sites, and the land disturbance permit number(s). Upon request by the engineer, the contractor shall submit a copy of its land disturbance permit(s) for Off-site locations. Based on the total acreage of land disturbance, both on and Off-site, the engineer shall determine if these Stormwater Compliance Requirements shall apply. The Contractor shall immediately report any changes to the planned area of Off-site land disturbance. The Contractor is responsible for obtaining its own separate land disturbance permit for Off-site areas.

2.0 Water Pollution Control Manager (WPCM). The Contractor shall designate a competent person to serve as the Water Pollution Control Manager (WPCM) for projects meeting the description in Section 1.0. The Contractor shall ensure the WPCM completes all duties listed in Section 2.1.

2.1 Duties of the WPCM:

(a) Be familiar with the stormwater requirements including the current MoDOT State Operating Permit for construction stormwater discharges/land disturbance activities; MoDOT's statewide Stormwater Pollution Prevention Plan (SWPPP); the Corps of Engineers Section 404 Permit, when applicable; the project specific SWPPP, the Project's Erosion & Sediment Control Plan; all applicable special provisions, specifications, and standard drawings; and this provision;

(b) Successfully complete the MoDOT Stormwater Training Course within the last 4 years. The MoDOT Stormwater Training is a free online course available at MoDOT.org;

(c) Attend the Pre-Activity Meeting for Grading and Land Disturbance and all subsequent Weekly Meetings in which grading activities are discussed;

(d) Oversee and ensure all work is performed in accordance with the Project-specific SWPPP and all updates thereto, or as designated by the engineer;

(e) Review the project site for compliance with the Project SWPPP, as needed, from the start of any grading operations until final stabilization is achieved, and take necessary actions to correct any known deficiencies to prevent pollution of the waters of the state or adjacent property owners prior to the engineer's weekly inspections;

(f) Review and acknowledge receipt of each MoDOT Inspection Report (Land Disturbance Inspection Record) for the Project within forty eight (48) hours of receiving the report and ensure that all Stormwater Deficiencies noted on the report are corrected as soon as possible, but no later than stated in Section 5.0.

3.0 Pre-Activity Meeting for Grading/Land Disturbance and Required Hold Point. A Pre-Activity meeting for grading/land disturbance shall be held prior to the start of any land disturbance operations. No land disturbance operations shall commence prior to the Pre-Activity meeting except work necessary to install perimeter controls and entrances. Discussion items at the pre-activity meeting shall include a review of the Project SWPPP, the planned order of grading operations, proposed areas of initial disturbance, identification of all necessary BMPs that shall be installed prior to commencement of grading operations, and any issues relating to compliance with the Stormwater requirements that could arise in the course of construction activity at the project.

3.1 Hold Point. Following the pre-activity meeting for grading/land disturbance and subsequent installation of the initial BMPs identified at the pre-activity meeting, a Hold Point shall occur prior to the start of any land disturbance operations to allow the engineer and WPCM the time needed to perform an on-site review of the installation of the BMPs to ensure compliance with the SWPPP is met. Land disturbance operations shall not begin until authorization is given by the engineer.

4.0 Inspection Reports. Weekly and post run-off inspections will be performed by the engineer and each Inspection Report (Land Disturbance Inspection Record) will be entered into a web-based Stormwater Compliance database. The WPCM will be granted access to this database and shall promptly review all reports, including any noted deficiencies, and shall acknowledge receipt of the report as required in Section 2.1 (f.).

5.0 Stormwater Deficiency Corrections. All stormwater deficiencies identified in the Inspection Report shall be corrected by the contractor within 7 days of the inspection date or any extended period granted by the engineer when weather or field conditions prohibit the corrective work. If the contractor does not initiate corrective measures within 5 calendar days of the inspection date or any extended period granted by the engineer, all work shall cease on the project except for work to correct these deficiencies, unless otherwise allowed by the engineer. All impact costs related to this halting of work, including, but not limited to stand-by time for equipment, shall be borne by the Contractor. Work shall not resume until the engineer approves the corrective work.

5.1 Liquidated Damages. If the Contractor fails to complete the correction of all Stormwater Deficiencies listed on the MoDOT Inspection Report within the specified time limit, the Commission will be damaged in various ways, including but not limited to, potential liability, required mitigation, environmental clean-up, fines, and penalties. These damages are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of $2,000 per day for failure to correct one or more of the Stormwater Deficiencies listed on the Inspection Report within the specified time limit. In addition to the stipulated damages, the stoppage of work shall remain in effect until all corrections are complete.

6.0 Basis of Payment. No direct payment will be made for compliance with this provision.

- ***Delete Sec 106.9 in its entirety and substitute the following:***

106.9 Buy America Requirements.
Buy America Requirements are waived if the total amount of Federal financial assistance applied to the project, through awards or subawards, is below $500,000.

106.9.1 Buy America Requirements for Iron and Steel.
On all federal-aid projects, the contractor's attention is directed to Title 23 CFR 635.410 *Buy America Requirements*. Where steel or iron products are to be permanently incorporated into the contract work, steel and iron material shall be manufactured, from the initial melting stage through the application of coatings, in the USA except for "minimal use" as described herein. Furthermore, any coating process of the steel or iron shall be performed in the USA. Under a general waiver from FHWA the use of pig iron and processed, pelletized, and reduced iron ore manufactured outside of the USA will be permitted in the domestic manufacturing process for steel or iron material.

106.9.1.1 Buy America Requirements for Iron and Steel for Manufactured items.
A manufactured item will be considered iron and steel if it is "predominantly" iron or steel. Predominantly iron or steel means that the cost of iron or steel content of a product is more than 50 percent of the total cost of all its components.

106.9.2 Any sources other than the USA as defined will be considered foreign. The required domestic manufacturing process shall include formation of ingots and any subsequent process. Coatings shall include any surface finish that protects or adds value to the product.

106.9.3 "Minimal use" of foreign steel, iron or coating processes will be permitted, provided the cost of such products does not exceed 1/10 of one percent (0.1 percent) of the total contract cost or $2,500.00, whichever is greater. If foreign steel, iron, or coating processes are used, invoices to document the cost of the foreign portion, as delivered to the project, shall be provided and the engineer's written approval obtained prior to placing the material in any work.

106.9.4 Buy America requirements include a step certification for all fabrication processes of all steel or iron materials that are accepted per Sec 1000. The AASHTO Product Evaluation and Audit Solutions compliance program verifies that all steel and iron products fabrication processes conform to 23 CFR 635.410 Buy America Requirements and is an acceptable standard per 23 CFR 635.410(d). AASHTO Product Evaluation and Audit Solutions compliant suppliers will not be required to submit step certification documentation with the shipment for some selected steel and iron materials. The AASHTO Product Evaluation and Audit Solutions compliant supplier shall maintain the step certification documentation on file and shall provide this documentation to the engineer upon request.

106.9.4.1 Items designated as Category 1 will consist of steel girders, piling, and reinforcing steel installed on site. Category 1 items require supporting documentation prior to incorporation into the project showing all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements. This includes the Mill Test Report from the original producing steel mill and certifications documenting the manufacturing process for all subsequent fabrication, including coatings. The certification shall include language that certifies the following. That all steel and iron materials permanently incorporated in this project was procured and processed domestically and all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410.

106.9.4.2 Items designated as Category 2 will include all other steel or iron products not in Category 1 and permanently incorporated in the project. Category 2 items shall consist of, but not be limited to items such as fencing, guardrail, signing, lighting and signal supports. The prime contractor is required to submit a material of origin form certification prior to incorporation into the project from the fabricator for each item that the product is domestic. The Certificate of Materials Origin form (link to certificate form) from the fabricator must show all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements and be signed by a fabricator representative. The engineer reserves the right to request additional information and documentation to verify that all Buy America requirements have been satisfied. These documents shall be submitted upon request by the engineer and retained for a period of 3 years after the last reimbursement of the material.

106.9.4.3 Any minor miscellaneous steel or iron items that are not included in the materials specifications shall be certified by the prime contractor as being procured domestically. Examples of these items would be bolts for sign posts, anchorage inserts, etc. The certification shall read "I certify that all steel and iron materials permanently incorporated in this project during all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements procured and

processed domestically in accordance with CFR Title 23 Section 635.410 Buy America Requirements. Any foreign steel used was submitted and accepted under minor usage". The certification shall be signed by an authorized representative of the prime contractor.

106.9.5 When permitted in the contract, alternate bids may be submitted for foreign steel and iron products. The award of the contract when alternate bids are permitted will be based on the lowest total bid of the contract based on furnishing domestic steel or iron products or 125 percent of the lowest total bid based on furnishing foreign steel or iron products. If foreign steel or iron products are awarded in the contract, domestic steel or iron products may be used; however, payment will be at the contract unit price for foreign steel or iron products.

106.9.6 Buy America Requirements for Construction Materials other than iron and steel materials. Construction materials means articles, materials, or supplies that consist of only one of the items listed. Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization of the construction material. Upon request by the engineer, the contractor shall submit a domestic certification for all construction materials listed that are incorporated into the project.

(a) Non-ferrous metals
(b) Plastic and Polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)
(c) Glass (including optic glass)
(d) Fiber optic cable (including drop cable)
(e) Optical fiber
(f) Lumber
(g) Engineered wood
(h) Drywall

106.9.6.1 Minimal Use allowance for Construction Materials other than iron or steel.
"The total value of the non-compliant products is no more than the lesser of $1,000,000 or 5% of total applicable costs for the project." The contractor shall submit to the engineer any non-domestic materials and their total material cost to the engineer. The contractor and the engineer will both track these totals to assure that the minimal usage allowance is not exceeded.

106.9.7 Buy America Requirements for Manufactured Products.
Manufactured products means:

(a) Articles, materials, or supplies that have been:
    (i) Processed into a specific form and shape; or
    (ii) Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.
(b) If an item is classified as an iron or steel product, a construction material, or a section 70917(c) material under § 184.4(e) and the definitions set forth in this section, then it is not a manufactured product. However, an article, material, or supply classified as a manufactured product under § 184.4(e) and paragraph (1) of this definition may include components that are construction materials, iron or steel products, or section 70917(c) materials.

106.9.7.1 Manufactured products are exempt from Buy America requirements. To qualify as a

manufactured product, items that consist of two or more of the listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the listed materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials.

106.9.7.2 Manufactured items are covered under a general waiver to exclude them from Buy America Requirements. To qualify for the exemption the components must comprise of 55% of the value of materials in the item. The final assembly must also be performed domestically.

- Third-Party Test Waiver for Concrete Aggregate

1.0 Description. Third party tests may be allowed for determining the durability factor for concrete pavement and concrete masonry aggregate.

2.0 Material. All aggregate for concrete shall be in accordance with Sec 1005.

2.1 MoDOT personnel shall be present at the time of sampling at the quarry. The aggregate sample shall be placed in an approved tamper-evident container (provided by the quarry) for shipment to the third-party testing facility.

2.2 AASHTO T 161 Method B Resistance of Concrete to Rapid Freezing and Thawing, shall be used to determine the aggregate durability factor. All concrete beams for testing shall be 3-inch wide by 4-inch deep by 16-inch long or 3.5-inch wide by 4.5-inch deep by 16-inch long. All beams for testing shall receive a 35-day wet cure fully immersed in saturated lime water prior to initiating the testing process.

2.3 Concrete test beams shall be made using a MoDOT approved concrete pavement mix design.

3.0 Testing Facility Requirements. All third-party test facilities shall meet the requirements outlined in this provision.

3.1 The testing facility shall be AASHTO accredited.

3.1.1 For tests ran after January 1, 2025, accreditation documentation shall be on file with the Construction and Materials Division prior to any tests being performed.

3.1.2 Construction and Materials Division may consider tests completed prior to January 1, 2025, to be acceptable if all sections of this provision are met, with the exception of 3.1.1. Accreditation documentation shall be provided with the test results for tests completed prior to January 1, 2025. No tests completed prior to September 1, 2024, will be accepted.

3.2 The testing facility shall provide their testing process, list of equipment, equipment calibration documentation, and testing certifications or qualifications of technicians performing the AASHTO T 161 Procedure B tests. The testing facility shall provide details on their freezing and thawing apparatus including the time and temperature profile of their freeze-thaw chamber. The profile shall include the temperature set points throughout the entirety of the freeze-thaw cycle. The profile shall show the cycle time at which the apparatus drains/fills with water and the cycle time at which the apparatus begins cooling the specimens.

3.3 Results, no more than five years old, from the third-party test facility shall compare within ±2.0 percent of an independent test from another AASHTO accredited test facility or with MoDOT test records, in order to be approved for use (e.g. test facility results in a durability factor of 79, MoDOT's recent durability test factor is 81; this compared within +2 percent). The independent testing facility shall be in accordance with this provision. The comparison test can be from a different sample of the same ledge combination.

3.4 When there is a dispute between the third party durability test results and MoDOT durability test results, the MoDOT durability test result shall govern.

3.5 Test results shall be submitted to MoDOT's Construction and Materials division electronically for final approval. Test results shall include raw data for all measurements of relative dynamic modulus of elasticity and percent length change for each individual concrete specimen. Raw data shall include initial measurements made at zero cycles and every subsequent measurement of concrete specimens. Raw data shall include the cycle count and date each measurement was taken. Test results shall also include properties of the concrete mixture as required by AASHTO T 161. This shall include the gradation of the coarse aggregate sample. If AASHTO T 152 is used to measure fresh air content, then the aggregate correction factor for the mix determined in accordance with AASHTO T 152 shall also be included.

4.0 Method of Measurement. There is no method of measurement for this provision. The testing requirements and number of specimens shall be in accordance with AASHTO T 161 Procedure B.

5.0 Basis of Payment. No direct payment will be made to the contractor or quarry to recover the cost of aggregate samples, sample shipments, testing equipment, labor to prepare samples or test samples, or developing the durability report.

- ***Delete paragraph 15.0 of the General Provision Disadvantaged Business Enterprise (DBE) Program Requirements and substitute the following*:**

15.0 Bidder's List Quote Summary. MoDOT is a recipient of federal funds and is required by 49 CFR 26.11 to provide data about its DBE program. All bidders who seek to work on federally assisted contracts must submit data about all DBE and non-DBEs in accordance with Sec 102.7.9. MoDOT will not compare the submitted Bidder's List Quote Summary to any other documents or submittals, pre or post award. All information will be used by MoDOT in accordance with 49 CFR 26.11 for reporting to USDOT and to aid in overall DBE goal setting**.**

- ***Add Sec 102.7.9 to include the following:***

102.7.9 Bidder's List Quote Summary. Each bidder shall submit with each bid a summary of all subcontractors, material suppliers, and service providers (e.g. hauling) considered on federally funded projects pursuant to 49 CFR 26.11. The bidder will provide the firm's name, the corresponding North American Industry Classification System (NAICS) code(s) the firm(s) were considered for, and whether or not they were used in the bid. The information submitted should be the most complete information available at the time of bid. The information shall be disclosed on the Bidder's List Quote Summary form provided in the

bidding documents and submitted in accordance with Sec 102.10. Failure to disclose this information may result in a bid being declared irregular.

J. SignCAD Information for New Sign Fabrication

1.0 Description. The contractor shall be made aware that MoDOT has SignCAD files of the proposed signs which call out the proper fabrication details. Within the contract plans, sign details are also provided but the SignCAD files may be obtained to prevent the sign details from being redesigned in other sign design programs. The contractor may request the SignCAD files showing the fabrication details **after** award from the project contact listed within JSP – Project Contact for Contractor/Bidder Questions. No additional payment shall be made if the contractor chooses to request and use this information. The only information to be provided would be in the format of the Bentley SignCAD program **(.sgn in version 2020 SignCAD or earlier),** or PDF files of those original SignCAD files.

K. Lump Sum Temporary Traffic Control

1.0 Delete Sec 616.11 and insert the following:

616.11 Method of Measurement. Measurement for relocation of post-mounted signs will be made to the nearest square foot of sign area only for the signs designated for payment on the plans. All other sign relocations shall be incidental. Measurement for construction signs will be made to the nearest square foot of sign area. Measurement will be made per each for each of the temporary traffic control items provided in the contract.

616.11.1 Lump Sum Temporary Traffic Control. No measurement will be made for temporary traffic control items grouped and designated to be paid per lump sum. The list of lump sum items provided in the plans or contract is considered an approximation and not a complete list. The list may exclude quantities for duplicate work zone packages used in simultaneous operations. The contractor shall provide all traffic control devices required to execute the provided traffic control plans for each applicable operation, stage, or phase. No measurement will be made for any additional signs or devices needed except for changes in the traffic control plan directed by the engineer.

2.0 Delete Sec 616.12 and insert the following:

616.12 Basis of Payment. All temporary traffic control devices authorized for installation by the engineer will be paid for at the contract unit price for each of the pay items included in the contract. Whether the devices are paid individually, or per lump sum, no direct payment will be made for the following:

(a) Incidental items necessary to complete the work, unless specifically provided as a pay item in the contract.
(b) Installing, operating, maintaining, cleaning, repairing, removing or replacing traffic control devices.
(c) Covering and uncovering existing signs and other traffic control devices.
(d) Relocating temporary traffic control devices, including permanent traffic control devices temporarily relocated, unless specifically included as a pay item in the contract.
(e) Worker apparel.

(f) Flaggers, AFADs, PFDs, pilot vehicles, and appurtenances at flagging stations.
(g) Furnishing, installing, operating, maintaining and removing construction-related vehicle and equipment lighting.
(h) Construction and removal of temporary equipment crossovers, including restoring pre-existing crossovers.
(i) Provide and maintaining work zone lighting and work area lighting.

616.12.1 Lump Sum Temporary Traffic Control. Traffic control items grouped together in the contract or plans for lump sum payment shall be paid incrementally per Sec 616.12.1.1. Alternately, upon request from the contractor, the engineer will consider a modified payment schedule that more accurately reflects completion of traffic control work. No payment will be made for any additional signs or devices needed except for changes in the traffic control plan directed by the engineer. Additional items directed by the engineer will be paid for in accordance with Sec 109.4. No adjustment to the price will be made for overruns or underruns of other work or for added work that is completed within existing work zones.

616.12.1.1 Partial payments. For purposes of determining partial payments, the original contract amount will be the total dollar value of all original contract line items less the price for Lump Sum Temporary Traffic Control (LSTTC). If the contract includes multiple projects, this determination will be made for each project. Partial payments will be made as follows:

(a) The first payment will be made when five percent of the original contract amount is earned. The payment will be 50 percent of the price for LSTTC, or five percent of the original contract amount, whichever is less.
(b) The second payment will be made when 50 percent of the original contract amount is earned. The payment will be 25 percent of the price for LSTTC, or 2.5 percent of the original contract amount, whichever is less.
(c) The third payment will be made when 75 percent of the original contract amount is earned. The payment will be 20 percent of the price for LSTTC, or two percent of the original contract amount, whichever is less.
(d) Payment for the remaining balance due for LSTTC will be made when the contract has been accepted for maintenance or earlier as approved by the engineer.

3.0 Temporary traffic control will be paid for at the contract lump sum price for Item:

Item No.	Unit	Description
616-99.01	Lump Sum	Lump Sum Temporary Traffic Control

L. Cooperation Between Contractors

1.0 Description. The contractor shall be aware that in addition to the Improve I-70 Design-Build project JST0020/J6I3033, there are other current or upcoming projects in the vicinity of the project that will take place during the sign replacement work:

others include:

2.0 Construction Requirements. The contractor shall establish contact with the SL District Office construction personnel to determine if there are any scheduling conflicts with sign replacement work along I-64 and I-170.

3.0 Basis of Payment. No direct payment will be made for compliance with this provision.

M. Disposition of Catwalks and Lighting Systems

1.0 Description. All existing catwalks and lighting assemblies indicated for removal in the plans shall be removed by the contractor with the contractor to dispose of or keep at their discretion. Walkways for Dynamic Message Signs shall not be removed.

2.0 Removal Requirements. The walkway grating, handrails, and supports shall be removed. Vertical supports shall be removed to an elevation of 6-inches below existing signs. Removal limits shall be verified prior to sawcutting. Removal shall also include removal of abandoned lighting fixtures. Electrical conduit and wiring, electrical disconnect boxes, and any ancillary banding or strapping shall be abandoned in place after wiring is cut. Any openings left in the structures shall be closed with conduit/knock out plugs to prevent intrusion of water or debris.

3.0 The contractor shall exercise reasonable care in the handling catwalks and lighting during the removal and transportation. Should any of the signs be damaged by the contractor's negligence, it shall be replaced at the contractor's expense.

4.0 Basis of Payment. Payment for the removal and transportation of catwalks, lighting systems and their components for disposal as shown in the plans, shall be considered completely covered by the contract unit prices for:

Item Number	Item Name	Units
903-99.03	Remove Catwalk	LF
903-99.02	Remove Lighting System	EA

N. Signing Locations Documentation by Contractor

1.0 Description. The contractor shall document the locations of all new signs installed by the contractor on the sign trusses. Using the Modified D-30 sheet provided for in the plans the contractor shall make copied of the sheet and fill out using ink pen all applicable dimensions and provide to the Engineer.

2.0 Basis of Payment. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials or time required to fulfill the above provisions.

O. Overhead Sign Mounting Vertical Location and Support Trim

1.0 Overhead Sign Mounting. The contractor shall verify locations of existing sign hardware to be replaced so that signs are fastened to overhead structure in accordance with the Standard Plans.

1.1 Overhead signs shall be mounted in accordance with Standard Plans 903.05 through 903.60.

1.2 All signs shall be centered vertically about the horizontal centerline of the truss, unless the minimum vertical distance to the pavement cannot be met.

1.3 When a horizontal mounting distance is not provided, the new sign shall be mounted as close to the old sign's position as practical centered over the lane, over the lane of travel that the sign is intended to direct, or as directed by the engineer.

1.4 Existing overhead vertical sign supports that are reused and that exceed the vertical dimensions of the new sign and extend beyond the structure's upper and lower chords shall be trimmed so as not to exceed the vertical dimensions of the new sign.

1.5 Vertical Upright Supports. The contractor shall provide and place any additional vertical upright supports required to mount new signs. Existing 3" and 6" upright supports may be re-used and reinstalled.

2.1 Vertical Upright Supports.

2.1.1 The contractor shall provide and place any additional vertical upright supports required to mount new signs. Existing upright supports may be re-used and reinstalled.

2.1.2 Additional 3" aluminum I-beam upright supports shall be provided and placed for installation of signs up to 3' greater in height than the existing signs on ground mounted signs.

1.5.1 Additional 6" aluminum I-beam upright supports shall be provided and placed for installation of signs over 3' greater in height than the existing signs, on overhead sign truss structures.

1.5.2 Additional 3" or 6" aluminum I-beam upright supports shall be provided and placed for installation of signs up to 3' greater in height than the existing signs, on overhead sign truss structures. Where additional 3" upright supports are used, these supports shall be located as close to the 6" upright supports as practical.

1.5.3 Additional 3" aluminum I-beam upright supports shall be provided and placed for installation of signs up to 3' greater in height than the existing signs on Type S, Type C and Type B tubular support structures. Where additional 3" upright supports are used, these supports shall be located as close to the 3½" X 2½" upright supports as practical.

1.5.4 Where 3" upright supports are used for an extended portion of a sign that is not above a 6" upright, the 3" upright shall be located at a 6" minimum to 3' maximum width from the extended edge of the sign.

1.6 All existing structural hardware and connections on the overhead structural members, connections, posts, and footings to be used in place shall be verified for conformance with the Standard Plans. Missing nuts, bolts, and clips will be replaced. Loose nuts, bolts, and clips will be tightened. Any damage incurred to the existing sign structures during sign removal and replacement activities will be repaired at the contractor's expense.

1.7 All existing vertical uprights that will no longer be used to support new or existing signs shall be removed.

3.0 Basis of Measurement. All costs associated with this work and compliance with this provision are considered incidental to other overhead signing costs.

4.0 Basis of Payment. No direct payment shall be made for any labor or materials needed to comply with this provision.

P. Ground Mount Post Length Verification

1.0 Ground Mounted Signs. Ground mounted signs shall be installed in accordance with Standard Plans 903.03. Locations of fuse plate and hinge breakaways on existing sign posts have been identified in the plans for modification as noted.

2.0 The contractor shall verify all proposed ground mounted sign post lengths in the field prior to sign installation.

3.0 Basis of Measurement. All costs associated with this work and compliance with this provision are considered incidental to other signing costs.

4.0 Basis of Payment. No direct payment shall be made for any labor or materials needed to comply with this provision.

Q. Ground Mount Post Trim

1.0 Ground Mounted Signs. Existing ground mounted sign posts for use in place with new signs shall be in accordance with Standard Plans 903.03. Locations of existing sign posts to be trimmed for new shorter signs have been identified in the plans as noted.

2.0 The contractor shall verify all proposed ground mounted sign post trimming in the field prior to trim operations.

3.0 Basis of Measurement. Measurement of the trim work is by each for each ground sign location identified in the plans. One sign location will be considered one instance of Ground Mount Post Trim

4.0 Basis of Payment. Ground Mount Post Trim of existing posts will be paid at the contract unit price for:

Item Number	Item Name	Units
Item 903-99.02	Ground Mount Post Trim	Each

R. Site Restoration

1.0 Description. Restore to its original condition any disturbed area at sites including, but not limited to, guardrail, pull box, conduit, and pole base installations. Restoration shall be accomplished by placing material equivalent to that of the adjacent undisturbed area. Disturbed unpaved areas on shall be fertilized and either seeded and mulched or sodded as directed by the engineer. The engineer will have the final authority in determining the acceptability of the restoration work.

2.0 If the contractor elects and receives approval from the engineer for alternate trench and/or pull box locations, any areas of concrete slope protection, sidewalk, pavement, shoulders, islands and medians – as well as any similar improvements consisting of asphaltic concrete materials – removed in conjunction with their construction shall be replaced with improvements of similar composition and thickness. Removals shall be achieved by means of full depth saw cuts, the resulting subgrade compacted to minimum density requirements and topped with 4 inches of compacted aggregate base course prior to replacement of surface materials. Concrete materials used in replacement, shall be approved by the engineer. A commercial asphalt mix may be used for replacement of asphaltic surfacing upon approval of the engineer.

2.1 Unless quantities and pay items for removal and subsequent replacement of improvements are contained in the plans for a specific location of removal work, no direct payment will be made for full depth saw cutting and the removal and subsequent replacement of asphalt or concrete slope protection, sidewalk, pavement, shoulders, islands, medians, sod and the required dowel and tie bars removed and replaced by the contractor as a result of his election to vary the location of conduit runs and pull boxes. This work will be considered as included in the various unit bid prices for conduit and pull boxes established in the contract, and no additional payment will be made.

2.2 Sidewalks and sidewalk ramps that are disturbed as described in this provision shall be replaced to meet current ADA standards.

2.3 Areas that are used by the contractor for jobsite trailers, equipment and materials storage, or used for project staging areas that are disturbed shall be cleaned up and restored to a condition that is both acceptable to the engineer and, at a minimum, equivalent to the existing site condition.

3.0 Basis of Payment. The cost of restoration of disturbed areas will be considered incidental to the signing replacement work. No direct payment will be made for any materials or labor, which is performed under this provision.

S. Location Adjustment for Utilities

1.0 Description. The Contractor shall be aware there are numerous utilities present along the route in this contract. Utility locates were not performed during the design phase of the project; therefore, the extent of conflicts with utilities, including MoDOT Signals and Lighting, are unknown.

2.0 Construction Requirements. Prior to any in-ground work, the Contractor shall request for utility locates by contacting Missouri One Call (1-800 DIG-RITE or mo1call.com) for any in-ground installation locations as per plans. The contractor may, at the discretion of the engineer, adjust the placement of the in-ground installation to avoid existing utilities.

2.1 If there are any conflicts with MoDOT ITS In-Ground Facilities, the Contractor shall field-verify those locations with the MoDOT Construction Inspector and shall be responsible for relocation to the satisfaction of the Engineer prior to any in-ground work.

2.2 Damage to any MoDOT facilities (with the exception of ITS facilities covered by another JSP) within the area of work caused by the contractor will be performed as follows:

a) Non-Emergency: Contractor will have 4 hours to propose a repair plan to the Engineer for a complete repair within 3 business days.

2.3 The contractor shall restore those areas disturbed by this work or installation according to specifications herein.

3.0 Basis of Payment. There shall be no direct pay for compliance with this provision.

T. MODOT ITS Equipment Within Project Limits

1.0 Description. MoDOT owned fiber optic cable and conduit, critical MoDOT power supplies and power cables, and pullboxes for fiber and power cabling, are present within the limits of this project. Damage or interruption of these items can cause extensive outages to the MoDOT network.

2.0 Construction Requirements. The contractor shall exercise reasonable care while completing work near these facilities, and shall take steps necessary to protect these facilities from damage for all items that are not specifically identified as being removed and/or relocated in the plans. Should any of the existing wiring or conduit be damaged by the contractor, it shall be replaced at the contractor's expense and the system in full operation within 4 hours of when the damage occurred. If it is mutually agreed upon between the Commission and the Contractor that the repairs will require more than 4 hours to complete, a mutually agreed upon time for repairs to be complete will be determined.

2.1 The contactor shall not modify any existing network or electrical connections within equipment cabinets, unless coordinated with MoDOT ITS staff. Existing connections include, but are not limited to, fiber jumpers, CAT5(e) cables, power supplies, and power strips. The connection to specific fiber and copper ports on network equipment shall also not be modified, unless coordinated with MoDOT ITS staff, as the network equipment has been configured specifically for each equipment cabinet. Significant network outages and unnecessary troubleshooting to investigate outages can occur, even with minor changes to existing connections within the cabinet.

3.0 Liquidated Damages. In the event of damage, if the system is not repaired and in full operation within 4 hours of the damage occurring, or within the timeframe agreed upon, the contractor will be charged with a liquidated damage specified in the amount of $100 per hour for each full hour that the system is not fully operational. This damage will be assessed independently of the liquidated damages specified elsewhere in the contract.

3.1 The MoDOT Engineer will also have the option of issuing a work order for MoDOT's on-call ITS Maintenance contractor to make repairs, if it is the Engineer's opinion that the contractor

creating the damage will not be able to make repairs in a timely manner. The ITS Maintenance contractor will then bill the contractor causing the damage directly.

4.0 Basis of Payment. No direct payment shall be made for compliance with this provision.

U. Overhead Sign Cantilever Box Truss

1.0 Description. This work shall consist of providing all costs for all labor and materials associated with the span, cantilever, and butterfly trusses, from the bottom of the baseplate on up, as illustrated in the Standard Plans, plans, signing details, and signing cross-sections. Any utility requiring relocation for post foundations shall be coordinated in accordance the Special Provision – Utility Coordination.

2.0 Prior to ordering the overhead structures, the Contractor shall verify the dimensions with the Engineer.

3.0 Basis of Payment. Payment for furnishing all labor, equipment, materials, and incidentals will be paid for at the contract unit price per each as follows:

Item No.	Item Name	Units
903-99.02	25 Ft Cantilever Box Truss	EA
903-99.02	110 Ft Overhead Sign Truss	EA

V. Missouri Logos

1.0 Description. Special Supplemental Guide Signs, which show the motorist services and sites available on a crossroad at or near an interchange, are within the limits of the project. These signs may include Specific Service Signing (Logos), Tourist-Oriented Destination signs (TODS), traffic generator signs for privately owned and operated tourist-oriented activity sites, and signing for Colleges, State and Federal Agency sites, Welcome Center Affiliate sites and State Correctional Centers.

1.1 These signs shall remain visible to and effective for the traveling public during all stages of construction.

1.2 Any work involving the relocation (permanent or temporary), repair, replacement or legend modification required for these signs is the responsibility of Missouri Logos. The contractor shall be solely responsible for determining if the project will affect these signs due to contractor operations during construction of this project. The contractor shall be responsible for coordinating this work with them using the contact information below and providing full cooperation during this work.

Ron Young – Missouri Logos
Phone: (573) 893-6662 (Mon-Fri 8:00 a.m. – 5:00 p.m.)
Email: ryoung@interstatelogos.com

Missouri Logos, LLC
4742-A County Club Dr.

Jefferson City, MO 65109
Phone: 800-666-3514
Email: missourilogos@interstatelogos.com
Web: missouri.interstatelogos.com

2.0 Replacement costs of any business specific logo panels damaged by vandalism or natural forces are the responsibility of the specified business. Any Supplemental Guide Sign damaged because of the contractor's action shall be replaced at the contractor's expense.

3.0 Basis of Payment. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials, or time required to fulfill this provision.

W. Overhead Sign Structure Repair

1.0 Description. This work shall consist of the replacement of truss members.

2.0 Repair Requirements. Truss members to be replaced were field marked during the inspection phase and are approximately located in the plans. The repair methods are detailed in the plan details.

3.0 Basis of Measurement. Measurement of the repair work is by each for each sign location identified in the plans. One sign location will be considered one instance of Existing Overhead Sign Structure Repair.

4.0 Basis of Payment. Sign truss replacement repairs will be paid at the contract unit price for:

Item Number	Item Name	Units
Item 903-99.02	Overhead Sign Structure Repair	Each

X. Removal and Delivery of Existing Signs JSP-12-01C

1.0 Description. All Commission-owned signs removed from the project shall be disassembled, stored, transported, and disposed of as specified herein. Sign supports, structures and hardware removed from the project shall become the property of the contractor.

2.0 Disassembly and Delivery.

2.1 All Commission-owned signs, (excluding abandoned billboard signs), designated for removal in the plans, or any other signs designated by the Engineer, shall be removed from the sign supports and structures, disassembled, stored, transported, and delivered by the contractor to the recycling center for destruction.

2.2 The contractor shall coordinate and make arrangements with the recycling center for delivery of the signs. Sign panels shall be disassembled and/or cut into sizes as required by the recycling center.

2.3 The contractor shall provide the Engineer with a "Sign Delivery Certification" attesting to completion of delivery of all existing sign material from the project to the recycler. In addition, the contractor shall provide to the Engineer a final "Sign Certification of Destruction" from the recycler that documents the total pounds of scrap sign material received from the project and attests that all such material will not be re-purposed and will be destroyed in a recycling process. The contractor can locate the required certification statements from the Missouri Department of Transportation website:

https://www.modot.org/forms-contractor-use

2.4 Funds received from the disposal of the signs from the recycling center shall be retained by the Contractor.

3.0 Basis of Payment. All costs associated with removing, disassembling and/or cutting, storing, transporting, and disposing of signs shall be considered as completely covered by the contract unit price for Item No. 202-20.10, "Removal of Improvements", per lump sum.

Item No.	Item Name	Units
202-20.10	Removal of Improvements	Lump Sum

Y. Grout Pad Removal

1.0 Description. This work includes the removal of existing grout pads at overhead sign structure footings and the installation of wire mesh at the grout pad removal locations noted in the plans.

2.0 Repair Requirements. The grout pads for removal were field marked during the inspection phase and are noted in the plans. The existing grout will be removed so as not to cause further damage to the foundation, post, base plate or anchor bolts. New wire mesh will be installed in accordance with Standard Plan 903.12 column and base plate details upon the removal of existing grout.

3.0 Basis of Measurement. Final measurement of Grout Pad Removal will be made for each location.

4.0 Basis of Payment. Grout Pad Removal will be paid at the contract unit price for:

Item Number	Item Name	Units
Item 903-99.02	Grout Pad Removal	Each

Z. Install Wire Mesh

2.0 Description. This work includes the installation of wire mesh at overhead sign structure footings at locations noted in the plans.

2.0 Repair Requirements. Footings missing wire mesh at the base plate were discovered during the inspection phase and are noted in the plans. New wire mesh will be installed in accordance with Standard Plan 903.12 column and base plate details.

3.0 Basis of Measurement. Final measurement of Grout Pad Removal will be made for each location.

4.0 Basis of Payment. Grout Pad Removal will be paid at the contract unit price for:

Item Number	Item Name	Units
Item 903-99.02	Install Wire Mesh	Each

AA. Repair Cracked and Spalled Footings

1.0 Description. This work includes the repair of cracked or spalled sign structure footings. This work shall be in accordance with Section 704 of the Standard Specifications.

2.0 Repair Requirements. The locations of existing footings for repair are shown in the plans.

3.0 Basis of Measurement. Final measurement of Repair Cracked/Spalled Footings will be made for each crack or spall location.

4.0 Basis of Payment. Repair Cracked/Spalled Footings will be paid at the contract unit price for:

Item Number	Item Name	Units
Item 704-99.04	Concrete Footing Repair (Formed)	SF
Item 704-99.04	Concrete Footing Repair (Unformed)	SF
Item 903-99.05	Concrete Footing Crack Filler	SY

BB. 4-Inch Square Steel Sign Post JSP-23-02

1.0 Description. The 4-inch square steel post and breakaway system shall be MASH 2016 approved and on MoDOT's Approved Products List.

2.0 Material. All material shall be in accordance with Division 1000 and as further specified per this provision. The 4-inch square steel posts are to be multi-directional. The posts shall be 4 inches square, 8 gauge, and galvanized. The 4-inch square steel posts shall be hot-dip galvanized after fabrication. Galvanizing of sign posts, bolts, nuts, washers, other appurtenances, and repair of galvanizing shall be in accordance with Sec. 1081.

3.0 Construction Requirements. Concrete footing construction shall be in accordance with Sec. 903.3.1.2. Post installation shall follow the manufacturer's recommendations.

4.0 Method of Measurement. Measurement of 4-inch square steel posts will be made to the nearest linear foot for each post, as shown on the plans. Measurement for 4-inch square steel post base will be made per each.

5.0 Basis of Payment. Payment for 4-inch square steel post will be paid for at the contract unit price for: **903-12.30 4-Inch Square Steel Post**. Post cap, post clamp, hardware (nuts and bolts), and backing bars are incidental to the post. Payment for **903-10.05 Square Steel Sign Post (4-In.) Base** shall include, complete and in place, the concrete footing, ground anchor, breakaway assembly, and hardware (nuts and bolts).

CC. Clearing Vegetation and Debris

1.0 Description. This work includes the clearing of vegetation or debris at the locations noted in the plans.

2.0 Requirements. The removal of vegetation and debris will be made at the locations as noted in the plans in accordance with Section 201 of the Standard Specifications.

3.0 Basis of Measurement. Final measurement of Clearing Vegetation and Debris will be measured as lump sum.

4.0 Basis of Payment. Clearing Vegetation and Debris will be paid at the contract unit price for:

Item Number	Item Name	Units
Item 903-99.01	Clearing Vegetation and Debris	LS

DD. Special Grading at Existing Footings

2.0 Description. This work includes special grading at existing overhead structure footings at the locations noted in the plans. Adjacent roadway, concrete barrier, and soundwall structures are to remain undisturbed.

2.0 Requirements. The grading shall be made at the locations as noted in the plans (see typical section detail) in accordance with Section 201 of the Standard Specifications.

3.0 Basis of Measurement. Final measurement of Special Grading will be measured as lump sum.

4.0 Basis of Payment. Special Grading at Existing Footings will be paid at the contract unit price for:

Item Number	Item Name	Units

Item 903-99.01	Special Grading at Exist. Footings	LS

EE. Airport Requirements JSP-15-09

1.0 Description. The project is located near a public use airport or heliport or is more than 200 feet above existing ground level, which requires adherence to Federal Aviation Regulation Part 77 (FAA Reg Part 77). "Near" to a public use airport or heliport is defined as follows:

- 20,000 feet (4 miles) from an airport with a runway length of at least 3,200 feet
- 10,000 feet (2 miles) from an airport with runway length less than 3,200 feet
- 5,000 feet (1 mile) from a public use heliport

2.0 The maximum height of the improvement and the equipment operating while performing the improvements was assumed to be 40 feet above the current travelway during the process of evaluating the project for compliance with FAA Reg Part 77.

2.1 If the contractor's height of equipment or if the improvement itself is beyond the assumed height as indicated in Sec 2.0, the contractor will work with the resident engineer to fill out the Form 7460-1, or revise the original Form 7460-1 based upon the proposed height and resubmit, if necessary, for a determination by FAA on compliance with FAA Reg Part 77. Further information can be found in MoDOT's Engineering Policy Guide 235.8 Airports. If the Form 7460-1 must be filed, the associated work shall not be performed prior to the FAA determination, which could take up to 45 days.

2.2 If the contractor's height of equipment and the improvement itself is below the assumed height as indicated in Sec 2.0, no further action is necessary to fulfill the requirements set forth in FAA Reg Part 77.

3.0 Basis of Payment. There will be no direct payment for any work associated with this provision. Contract time extension will be given for the time necessary to obtain or revise the FAA permit. Any delays or costs incurred in obtaining the revised permit will be noncompensable.

FF. Sign Post and Footing Removal

1.0 Description. The project includes ground mounted sign post footings and overhead structural post footings for removal. The contractor shall remove ground mounted post footings to an elevation flush with the adjacent existing ground, unless otherwise noted in the plans. Overhead structural post footings shall be removed to a depth of two feet below the adjacent existing ground, unless otherwise noted. Any voids remaining due to the removal of the footings will be backfilled to the existing ground line.

2.0 Basis of Payment. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials or time required to fulfill the above provisions. This work is considered included in the item Removal of Improvements.

GG. Sign Post Footing Grading

1.0 Description. This work shall consist of backfilling or removing excess grading material at locations of existing ground mount sign footings to be used in place.

2.0 Grading Requirements. Locations of erosion near the breakaway stubs for existing ground mounted sign posts were noted during the inspection phase of the project. These locations require either additional material to recreate an existing ground line a 4-in maximum from the bottom of breakaway stub, or requires the exposure of breakaway stubs where excess material has collected at the bottom of footings. Grading limits are shown in a typical detail in the plans.

Backfill material shall be in accordance with Section 202 of the Standard Specifications. Backfilling shall be performed in accordance with Section 203 of the Standard Specifications.

3.0 Basis of Measurement. Measurement of the grading work is by each for each sign location identified in the plans. One existing ground mount sign location will be considered one instance of Sign Post Footing Grading.

4.0 Basis of Payment. Payment for Sign Post Footing Grading will be made for the cost of equipment, labor, materials, and hardware at the unit contract price for:

Item Number	Item Name	Units
Item 903-99.02	Sign Post Footing Grading	Each

HH. Overhead Sign Attachment Hardware Replacement

1.0 Description. This work shall consist of repairing or replacing standard attachment hardware at the back of overhead sign panels in accordance with Standard Plans.

2.0 Requirements. Locations of missing, incorrect, or corroded sign attachment hardware were identified during the inspection phase of the project and the locations for repair have been noted in the plans. Tighten any additional loose clips or nuts.

3.0 Basis of Measurement. Measurement of the repair work is by each for each sign location identified in the plans. One sign location will be considered one instance Overhead Sign Attachment Hardware Replacement.

4.0 Basis of Payment. Payment for Overhead Sign Attachment Hardware Replacement will be made for the cost of equipment, labor, materials, and hardware at the unit contract price for:

Item Number	Item Name	Units
Item 903-99.02	Overhead Sign Attachment Hardware Replacement	Each

II. Overhead Sign Attachment Hardware Repair

1.0 Description. This work shall consist of repairing standard attachment hardware of overhead structure, overhead sign panels, or dynamic message boards in accordance with Standard Plans.

2.0 Requirements. Hardware repair locations were identified during the inspection phase of the project and the locations for repair have been noted in the plans.

3.0 Basis of Measurement. Measurement of the repair work is by each for each sign location identified in the plans. One sign location will be considered one instance Overhead Sign Attachment Hardware Repair.

4.0 Basis of Payment. Payment for Overhead Sign Attachment Hardware Repair will be made for the cost of equipment, labor, materials, and hardware at the unit contract price for:

Item Number	Item Name	Units
Item 903-99.02	Overhead Sign Attachment Hardware Repair	Each

JJ. Sign Truss Rupture Repair

1.0 Description. This work shall consist of repairing overhead sign truss structures as shown in the details in the plans.

2.0 Requirements. Locations of ruptured or cracked sign truss members were identified during the inspection phase of the project and the locations for repairs have been noted in the plan details.

3.0 Basis of Measurement. Measurement of the repair work is by each for each sign location identified in the plans. One sign location will be considered one instance Sign Truss Rupture Repair.

4.0 Basis of Payment. Payment for Sign Truss Rupture Repair be made for the cost of equipment, labor, materials, and hardware at the unit contract price for:

Item Number	Item Name	Units
Item 903-99.02	Sign Truss Rupture Repair	Each

KK. Sign Structure Removal

1.0 Description. This work includes the removal of existing sign structures at the locations noted in the plans.

2.0 Construction Requirements. The existing sign structure for removal is at the location noted in the plans. The structure removal includes the overhead sign structure, posts and foundations. Overhead structural post foundations shall be removed to a depth of two feet below the adjacent existing ground, unless otherwise noted. Any voids remaining due to the removal of the foundations will be backfilled to the existing ground line.

The removal of the overhead structural signs shall be in accordance with the special provision for the Removal and Delivery of Existing Signs. Existing structural signs to be relocated to new structure are also noted in the plans. The existing structure and signs shall not be removed until the new structure is installed and ready for the new and existing signs to be relocated.

3.0 Basis of Measurement. Final measurement of Sign Structure Removal will be made for each location.

4.0 Basis of Payment. Sign Structure Removal will be paid at the contract unit price for:

Item Number	Item Name	Units
Item 903-99.02	Remove Exist. Overhead Sign Span Truss	Each

LL. TIGHTEN BOLTS OR ANCHOR NUTS

1.0 Description. This work shall consist of tightening standard bolt and/or nut hardware at the sign post base plate to footing connection or structure post to truss connection in accordance with Standard Plans.

2.0 Requirements. Locations of loose hardware were identified during the inspection phase of the project and the locations for tightening have been noted in the plans.

3.0 Basis of Measurement. Measurement of the work is by each for each sign location identified in the plans. One sign location will be considered one instance Tighten Bolts or Anchor Nuts.

4.0 Basis of Payment. Payment for Tighten Bolts or Anchor Nuts will be made for the cost of equipment, labor, materials, and hardware at the unit contract price for:

Item Number	Item Name	Units
Item 903-99.02	Tighten Bolts or Anchor Nuts	Each

MM. REPLACE COVER PLATE

1.0 Description. This work shall consist of replacing cover plates for handholes in overhead structure posts at locations as noted in the plans in accordance with Standard Plans.

2.0 Requirements. Locations of missing handhole cover plates were identified during the inspection phase of the project and the locations for replacement have been noted in the plans. The contractor shall field verify location and cover plate size before ordering replacement hardware.

3.0 Basis of Measurement. Measurement of the work is by each for each sign location identified in the plans. One sign location will be considered one instance Replace Cover Plates.

4.0 Basis of Payment. Payment for Replace Cover Plates will be made for the cost of equipment, labor, materials, and hardware at the unit contract price for:

Item Number	Item Name	Units
Item 903-99.02	Replace Cover Plate	Each

NN. MODIFY STEEL POST HINGES

1.0 Description. This work shall consist of modifying non-standard fuse plates and/or splice plates at existing ground mount sign locations as noted in the plans.

2.0 Requirements. Locations of non-standard fuse plates and splice plates on structural steel posts were identified during the inspection phase of the project and the locations for modifying the hinges are noted in plans. New fuse or splice plates will be installed at those locations in accordance with MoDOT Standard Plans. The contractor shall field verify locations prior to commencing the post modifications.

3.0 Basis of Measurement. Measurement of the work is by each for each sign location identified in the plans. One sign post will be considered one instance of Modify Steel Post Hinges.

4.0 Basis of Payment. Payment will be made for the cost of equipment, labor, materials, and hardware required to complete modifications at the unit contract price for:

Item Number	Item Name	Units
Item 903-99.02	Modify Steel Post Hinges	Each

OO. REPLACE STRUCTURE POST CAP

1.0 Description. This work shall consist of providing and installing overhead structure post caps that are missing from existing structures.

2.0 Requirements. The location of missing caps on existing overhead sign posts were identified during the inspection phase of the project and are noted in plans. The contractor shall field verify location and top of post dimensions prior to commencing the work.

3.0 Basis of Measurement. Measurement of the work is by each for the location of the missing structure post caps in the plans. One existing post with missing cap will be considered one instance of Replace Structure Post Cap.

4.0 Basis of Payment. Payment for will be made for the cost of equipment, labor, materials, and hardware at the unit contract price for:

Item Number	Item Name	Units
Item 903-99.02	Replace Structure Post Cap	Each

PP. Truck Mounted Attenuator (TMA) for Stationary Activities JSP-23-04

1.0 Description. Provide and maintain Truck Mounted Attenuators (TMA) in accordance with Sec 612 and as specified herein.

2.0 Construction Requirements. Truck Mounted Attenuators (TMA) shall be used for the work activities indicated in the plans or specified herein.

2.1 Contractor activities for sign panel or structure replacement – TMA use is shown on Temporary Traffic Control Details in the plans.

3.0 Method of Measurement. No measurement will be made for Truck Mounted Attenuators (TMA).

4.0 Basis of Payment. Delete Sec 612.5.1 and substitute with the following:

612.5.1 No payment will be made for truck mounted attenuators (TMAs) used in mobile operations or for any TMAs designated as optional.

612.5.1.1 Payment for TMAs required for stationary work activities will be paid for at the contract unit bid price for Item 612-30.01, Truck Mounted Attenuator (TMA), per lump sum. The lump sum payment includes all work activities that require a TMA, regardless of the number of deployments, relocations, or length of time utilized. No payment will be made for repair or replacement of damaged TMAs.

QQ. High-Tension Guard Cable Barrier JSP 24-03

1.0 Description. This work shall consist of all labor, equipment, and materials to remove, install, repair, and replace a guard cable barrier system including all hardware and appurtenances as shown on the plans or as directed by the engineer. The cable barrier system shall function in accordance with the requirements of MASH 2016 or NCHRP 350, Test Level 3, and be approved by the Federal Highway Administration. Test Level 3 acceptable products, for use as a cable barrier system, are included in the list of pre-qualified products displayed on MoDOT's website. Acceptable products shall include galvanized high-tension wire ropes and anchorages.

2.0 Construction Requirements. Line posts shall be provided and installed in accordance with the manufacturer's shop drawings and shall be placed plumb. All posts in final position shall be free from any distortion, burring, or other damage. Spacing of the posts shall not exceed 20 feet.

2.1 Anchor Assemblies. An anchor assembly, as specified in the manufacturer's shop drawings, shall be constructed at each end of a cable barrier run. The anchor assembly shall function in accordance with the requirements of MASH 2016 or NCHRP 350, Test Level 3, and be approved by the Federal Highway Administration. Anchors shall be constructed on firm, stable, undisturbed soil to the minimum dimension shown on the shop drawings. Anchor bolts and anchor post slip bases shall be firmly held in position at the top by templates during concrete replacement. Backfill

shall be thoroughly compacted with mechanical tampers with care taken to prevent damage to the finished concrete. Backfill shall be brought up level with the finished grade line.

2.2 Cable. The galvanized wire rope shall be ¾" pre-stretched 3 x 7 construction as approved by the Federal Highway Administration during the system's acceptance testing. Threaded terminals (wedge or swaged type) shall be furnished. Swaged terminals may be shop- or field-swaged. Threaded terminals shall be right hand (RH) or left hand (LH) threaded M 24 x 3 pitch to ANSI B 1.13 M. The body of the threaded terminal shall provide a minimum of 5.9" of wire rope penetration depth. Threaded terminals shall be galvanized after threading to ASTM A 151. Turnbuckle or rigging screws shall be of the size and shape shown in the manufacturer's shop drawings. Rigging screws shall be of a solid or closed body type with two inspection holes to determine threaded rope terminal penetration. Rigging screws shall be galvanized to ASTM A 153 after threading.

2.3 Cable Tensioning. The cable height above ground shall be in accordance with the manufacturer's shop drawings. The cable shall be tensioned immediately after initial installation. Tension shall be rechecked and adjusted, if necessary, three to five days after initial tensioning on cable system sections with lengths greater than 2500 feet. A tension log form shall be completed showing: the time, date, location, ambient temperature and final tension reading, signed by the person performing the tensioning, and furnished to the engineer upon completion of the work. This form shall also include the system manufacturer's recommended tension chart.

2.4 Delineators. Delineator spacing and reflector colors shall be in accordance with Sec 606.50.2.

3.0 Method of Measurement. Measurement of the cable barrier will be made from center of line posts, totaled to the nearest linear foot.

3.1 Anchor Assemblies. Measurement of anchor assemblies will be made per each.

4.0 Basis of Payment. The accepted quantities of cable barrier, anchor assemblies, cable barrier to guardrail interfaces will be paid for at the contract unit price with Item No. 606-99.03 High Tension Guard Cable (per linear foot), Item No. 606-99.02 HTGC Anchor Assembly (per each), and Item No. 606-99.02 Cable to Guardrail Transition (per each). Any anchor assembly required for cable to guardrail transition shall be considered included in the contract unit price for cable to guardrail transition. No direct payment will be made for delineators or setting post in rock.