

Job No.: J9P3629

Route: Various

Counties: Various

JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)

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

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	MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65102 Phone 1-888-275-6636
	If a seal is present on this sheet, JSP's have been electronically sealed and dated.
	JOB NUMBER: J9P3629 VARIOUS COUNTIES, MO DATE PREPARED: 06/10/2021
	ADDENDUM DATE:
Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: ALL	

JOB
SPECIAL PROVISIONS

A. General – State JSP-09-03G

1.0 Description. The Federal Government is not participating in the cost of construction of this project.

1.1 This contract requires payment of the prevailing hourly rate of wages for each craft or type of worker required to execute the contract as determined by the Missouri Department of Labor and Industrial Relations. The current State Wage Rates can be found on the Missouri Department of Transportation web page at www.modot.org under "Doing Business with MoDOT", "Contractor Resources" for the applicable bid opening. This supplemental bidding document has 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.

State Wage Rates

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 2021 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. Project Contact for Contractor/Bidder Questions

1.0 Any project specific questions shall be directed to the to the following contact:

Jeffery Wachter, Project Contact
Southeast District
2675 N. Main Street
Sikeston, MO 63801

Telephone Number: (573) 472-5294
Email: Jeffery.Wachter@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 contract administrator. The contract will be administered and inspected by the engineer/contract administrator listed below:

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Donald Hills, Resident Engineer
Poplar Bluff Project Office
282 County Road 523
Poplar Bluff, MO. 63901

Telephone Number: (573) 840-9781
Email: Donald.Hills@modot.mo.gov

3.0 All questions concerning the bid document preparation can be directed to the Central Office – Design at (573) 751-2876.

C. Scope of Work

1.0 The scope of work for this project is to repair eroded slopes and permanently stabilize the slopes to prevent future erosion. The work will be prescribed through individual Job Orders issued to the contractor by the engineer for each work location.

2.0 The work boundaries for the terms of the contract include all Commission owned routes in the following counties:

Bollinger	Iron	Perry	Stoddard
Butler	Madison	Reynolds	Texas
Cape Girardeau	Mississippi	Ripley	Wayne
Carter	New Madrid	Scott	Wright
Douglas	Oregon	Shannon	
Dunklin	Ozark	St. Francois	
Howell	Pemiscot	Ste. Genevieve	

3.0 The Commission will evaluate the bids with the intent of awarding the contract to the lowest responsible bidder. The minimum budget for this project is \$0 and the maximum anticipated budget is \$500,000.

4.0 The Commission is not bound to issue a minimum or maximum number of Job Orders during the contract term. It is the intent, however, to meet the anticipated budget, as noted elsewhere within this proposal. Award of contract does not guarantee any job orders during the duration of the contract.

D. Job Order Contract

1.0 A Job Order Contract is an indefinite quantity contract pursuant to which the contractor shall perform the work itemized in a Job Order at individual work locations throughout the project limits. The contractor shall perform all tasks itemized in the Job Order.

2.0 The engineer will identify the required work at an individual work location in collaboration with the contractor at a Joint Scope Meeting. The engineer will provide the contractor with a draft Detailed Scope of Work which the contractor shall review. Once the detailed Scope of Work is agreed upon, the engineer will issue a Job Order to the contractor. At any given time the contractor may be performing more than one Job Order.

3.0 The contract includes a list of fixed cost pay items with fixed unit prices. Payment for the work will be determined by multiplying the fixed unit prices by an applicable Adjustment Factor. The contractor shall bid three separate Adjustment Factors to be applied to the fixed unit prices as applicable for work performed during normal working hours, nighttime hours or weekend hours as defined elsewhere in this contract. The total cost of an individual Job Order will be determined by multiplying the fixed unit prices of each fixed cost pay item by the appropriate quantity and then multiplying the total cost of all pay items by the appropriate Adjustment Factor.

4.0 Definitions.

4.1 Detailed Scope of Work. A written document that sets forth the work the contractor is obligated to perform in connection with a particular Job Order.

4.2 Job Order. A written order from the engineer to the contractor directing the work required at an individual work location in accordance with the Detailed Scope of Work within the Job Order Completion Time.

4.3 Job Order Completion Time. The time within which the contractor must complete the Detailed Scope of Work for a particular Job Order.

4.4 Fixed Cost Pay Item. Work for which a description and fixed cost is set forth in the fixed cost pay item list.

4.5 Non-Fixed Cost Pay Item. Work for which a description and fixed cost is not set forth in the pay item list. Payment for non-fixed cost pay items will be determined in accordance with Sec 109.4.2, 109.4.3, or 109.4.4. Non-fixed cost pay items will be paid using an Adjustment Factor of 1.000.

E. Procedures for Developing a Job Order

1.0 Initiation of a Job Order. The engineer will notify the contractor of a potential Job Order by issuing a Notice of Joint Scope Meeting. The notification will be issued by electronic mailing or facsimile machine at the discretion of the engineer to the contractor, unless the engineer approves other arrangements. The contractor shall confirm receipt of all job orders by the same means as issued. Notification for accelerated repair work can be initiated by telephone.

1.1 The contractor shall attend the Joint Scope Meeting and be prepared to discuss, at a minimum:

- a. The general scope of the work;
- b. Existing conditions, presence of waterways, wetlands, or other natural resources;
- c. Presence of hazardous materials;
- d. Methods and alternative for accomplishing the work;
- e. Access to the site;
- f. Staging area availability/location;
- g. Requirements for catalog cuts, technical data, samples and shop drawings;
- h. Requirements for professional services, including sketches, drawings, and specifications;
- i. Hours of operation;

- j. Anticipated working days and schedule;
- k. Liquidated damages;
- l. Specific quality requirements for equipment and material;
- m. List of anticipated Subcontractors and Material Suppliers.

1.2 Upon completion of the joint scoping process, the engineer will prepare a draft detailed Scope of Work referencing any sketches, drawings, photographs, and specifications required to document accurately the work to be accomplished. The contractor shall review the detailed Scope of Work and request any desired changes or modifications thereto. When an acceptable detailed Scope of Work has been completed, the engineer will issue a Draft Job Order.

1.3 The contractor does not have the right to refuse to perform any Job Order or any work identified in a Job Order. If the contractor refuses to perform any Job Order or any work identified in a Job Order, the contractor may be considered to be in default in accordance with Sec 108.

2.0 Preparation Of The Job Order. The engineer will prepare a Draft Job Order and submit the order to the contractor for final review. The contractor and the engineer will jointly review the Draft Job Order and finalize the order. Establishment of pricing for any non-fixed cost pay items shall be in accordance with Sec 109.4.2 or 109.4.3. If no agreement to pricing can be made then the work will proceed with payment for non-fixed cost items under Sec 109.4.4.

2.1 When the engineer and contractor have agreed to the scope of work and Fixed Cost and Non-Fixed Cost tasks to be performed, the engineer will finalize the official Job Order and submit a signed Job Order for the contractor to review and sign. The affixed signatures by the engineer and the contractor shall bind the Job Order. If the contractor is not clear or in disagreement with the terms of the Job Order he shall NOT sign the Job Order, but shall work with the engineer to clear up any discrepancies in the work to be done. If the contractor fails to execute the Job Order, the contractor may be considered to be in default in accordance with Sec 108.

3.0 The Commission reserves the right to cancel or reject a Job Order for any reason. The Commission also reserves the right not to issue a Job Order if that is determined to be in the best interests of the Commission. The contractor shall not recover costs arising out of or related to the development of the Job Order including but not limited to the costs to attend the Joint Scope Meeting, review the Detailed Scope of Work, subcontractor costs, and the cost to review the Job Order Proposal with the Commission.

4.0 Job Order Issuance. The Job Order will be signed by the engineer and delivered to the contractor. The Job Order will reference the Detailed Scope of Work and set forth the amount to be paid and the time to complete the work.

5.0 Notice to Proceed. Each Job Order will include a notice to proceed, which will stipulate the date the contractor is expected to begin work. The notice to proceed date will normally be within 14 calendar days after the job order is issued. For Job Orders that require an accelerated response, contractors shall respond to the work location and begin the accelerated repair work within 5 calendar days of the notice to proceed established in the Job Order.

5.1 The contractor shall provide 48-hour notification prior to start of repair work for accelerated Job Orders and 5-days notification for all other Job Orders.

F. Term of Contract

1.0 The term of this contract shall be for the period commencing March 01, 2022 and shall end February 28, 2023.

1.1 Any work already ordered or in progress when the contract term ends shall be completed in accordance with the provisions, price proposals and timelines established in the issued Job Order(s), or liquidated damages will be assessed against the contractor in accordance with the provisions of this contract.

G. Fixed Unit Price List

1.0 Description. A fixed unit price list containing unit prices associated with erosion control is listed below. Fixed unit prices are for complete and in-place construction and include all labor, equipment and material required to complete the construction task. All labor, material, equipment and work required by a specification shall be considered part of the fixed unit price, unless otherwise stated elsewhere in this contract. Pay limits will be defined in the approved Job Order.

2.0 Fixed Unit Price List for Erosion Control Job Orders.

Item Number	Description	Unit	Fixed Unit Price
2079909	MISC. MODIFIED LINEAR GRADING, CLASS 2	STA.	\$550.00
6119910	FURNISHING AND PLACING TYPE 1 ROCK DITCH LINER	TON	\$40.00
6119910	FURNISHING AND PLACING TYPE 2 ROCK DITCH LINER	TON	\$35.00
6119910	FURNISHING AND PLACING TYPE 2 ROCK BLANKET	TON	\$30.00
6119910	ADDITIONAL HAULING PER TON (DUNKLIN, PEMISCOT, MISSISSIPPI, NEW MADRID COUNTIES ONLY)	TON	\$10.00
6161005	CONSTRUCTION SIGNS	S.F.	\$7.00
6161008	ADVANCED WARNING RAIL SYSTEM	EACH	\$45.00
6161009	FLAG ASSEMBLY	EACH	\$20.00
6161025	CHANNELIZER (TRIM LINE)	EACH	\$16.00
6161030	TYPE III MOVEABLE BARRICADE	EACH	\$75.00
6161033	DIRECTIONAL INDICATOR BARRICADE	EACH	\$52.00
6161040	FLASHING ARROW PANEL	EACH	\$650.00
6161055	SEQUENTIAL FLASHING WARNING LIGHT	EACH	\$50.00
6161098	CMS, CONTRACTOR FURNISHED/RETAINED	EACH	\$1,200.00
6169902	LEFT/RIGHT LANE CLOSURE	EACH	\$2,500.00
6169902	SHOULDER CLOSURE (NO ENCROCHMENT)	EACH	\$900.00
6189902	MOBILIZATION	L.S.	\$6,000.00
6189902	ADDITIONAL MOBILIZATION FOR SEEDING	EACH	\$600.00
6240103A	PERMANENT EROSION CONTROL GEOTEXTILE	S.Y.	\$2.00
8051000A	SEEDING - COOL SEASON MIXTURES	ACRE	\$1,200.00

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8052000A	SEEDING - WARM SEASON MIXTURES	ACRE	\$1,200.00
8059919	SOIL BIOSTIMULANT	ACRE	\$4,000.00
8059919	FIBER REINFORCED MATRIX	ACRE	\$4,000.00
8061005	ROCK DITCH CHECK	L.F.	\$12.00
8061017	TEMPORARY SEEDING AND MULCHING	ACRE	\$1,200.00
8061019	SILT FENCE	L.F.	\$2.50
8064134	TYPE 1D EROSION CONTROL BLANKET	S.Y.	\$2.00
8064138	TYPE 2D EROSION CONTROL BLANKET	S.Y.	\$2.75
8064140	TYPE 3B EROSION CONTROL BLANKET	S.Y.	\$3.50
8064141	TYPE 4 EROSION CONTROL BLANKET	S.Y.	\$5.00

H. Adjustment Factors

1.0 Description. Adjustment Factors include business and construction related costs as defined in this specification. It is the responsibility of the contractor to verify the unit prices provided in this contract and to modify their Adjustment Factors accordingly.

1.1 Business Costs. Business related costs consist of profit, overhead costs, subcontractor profit and overhead, taxes, finance costs, and other costs including but not limited to;

- (a) insurance, bonds and indemnification
- (b) project meetings, training, management and supervision
- (c) project office staff and equipment
- (d) employee or subcontractor wage rates that exceed prevailing wages
- (e) fringe benefits, payroll taxes, worker's compensation, insurance costs and any other payment mandated by law in connection with labor that exceeds the labor rate allowances.
- (f) Business risks such as the risk of low than expected volumes of work, smaller than anticipated Job Orders, poor subcontractor performance, and inflation or material cost fluctuations.

1.2 Construction Costs. Construction related costs include but are not limited to;

- (a) personnel safety equipment
- (b) security requirements
- (c) excess material waste
- (d) daily and final clean-up
- (e) costs resulting from inadequate supply of materials, fuel, electricity, or skilled labor
- (f) costs resulting from productivity loss
- (g) working in extreme and adverse weather conditions
- (h) any other discreet items of work required to complete a particular Job Order.

1.3 General Costs. The above lists are not exhaustive and are intended to provide general examples of cost items to be included in the contractor's Adjustment Factors as defined in the contract.

2.0 Normal Work Adjustment Factor. The Adjustment Factor for *Normal Working Hours* includes work conducted from 6:00 a.m. to 7:30 p.m. Monday through Friday.

2.1 In addition to the time period specified in 2.0, work performed during *Normal Working Hours* must also be done during daylight hours, unless the contractor provides the necessary lighting equipment. Daylight hours are defined as ½ hour after sunrise to ½ hour before sunset. If the contractor chooses to work during *Normal Working Hours*, but outside of the defined daylight hours, the contractor shall provide lighting equipment at no additional cost to the Commission.

3.0 Nighttime Work Adjustment Factor. If the engineer determines traffic volumes are such that work cannot be performed during the daytime, Monday through Friday, without significant traffic impacts, the Job Order will specify nighttime repair operations. The Adjustment Factor for *Nighttime Work* includes any work conducted from 7:30 p.m. to 6:00 a.m. Monday through Thursday.

3.1 Any costs for additional lighting equipment necessary to perform nighttime repair operations are considered included in the Nighttime Work Adjustment Factor.

4.0 Weekend Work Adjustment Factor. If the engineer determines traffic volumes are such that work cannot be performed Monday through Friday without significant traffic impacts, the Job Order will specify weekend repair operations. The Adjustment Factor for *Weekend Work* includes any work conducted from 7:30 p.m. on Friday through 6:00 a.m. on Monday, night or day, or a Holiday.

4.1 All work shall be scheduled to avoid major holidays. During the term of this contract there are six major holiday periods: Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas, and New Year's Day. All lanes shall be scheduled to be open to traffic during these holiday periods, from 12:00 noon on the last working day preceding the holiday until 9:00 a.m. on the first working day subsequent to the holiday, unless designated as *Weekend Work* by the engineer.

5.0 The Adjustment Factor for Nighttime Work and Weekend Work will not be applied to adjust the unit bid price(s) unless the contractor is specifically directed to perform *Nighttime* or *Weekend Work* by the engineer as part of the Job Order. If the Job Order does not otherwise restrict nighttime or weekend hours, the contractor may, with the approval of the engineer, perform some or all of the repair operations during nighttime or weekend hours but will be paid for the Adjustment Factor specified in the Job Order (i.e. the contractor may be allowed to complete nighttime work on the weekend but will be paid the Nighttime Adjustment Factor).

I. Bidding the Adjustment Factors

1.0 The bidder shall complete the bid form by writing in three Adjustment Factors, one for *Normal Working Hours* one for *Nighttime Work* and one for *Weekend Work*. The Adjustment Factors shall be specified to three decimal places. Note that these are contract pay items for contractor payment, not work items.

EXAMPLE: The Adjustment Factors shall be entered as the following example illustrates.

1	.	1	9	8
OR				
0	.	9	8	7

Note: The Adjustment Factors used are for example purposes only and are not an indication of factors being bid by the contractor.

J. Contract Award

1.0 The Commission will evaluate the bids with the intent of awarding the contract to the lowest responsible bidder.

2.0 The lowest bid will be determined by multiplying each individual Adjustment Factor by the anticipated budget for each individual adjustment factor. For purposes of determining award of this contract, the estimated percentage of work performed during Normal Working Hours is 90%, the estimated percentage of Nighttime work is 5%, and the estimated percentage of Weekend work is 5%. The extended amount for each item will then be totaled, and the total sum will be used for bid comparison purposes. The initial contract value will be equal to the total sum. The dollar quantities provided in the bid form are anticipated budgets and are not intended to represent the actual value of work that will be assigned. The anticipated budget for this project is \$500,000.

EXAMPLE: The initial contract value is determined by entering the Adjustment Factors as the following example illustrates:

Item Description	Approximate Quantity	Unit	Unit Price		Bid Amount	
			Dollar	Cts	Dollar	Cts
6189916 Normal Work Adjustment Factor	450,000	DLR	0.975		438,750.00	
6189916 Nighttime Work Adjustment Factor	25,000	DLR	1.250		31,250.00	
6189916 Weekend Work Adjustment Factor	25,000	DLR	1.300		32,500.00	
Bid Total					502,500.00	

Note: The Adjustment Factors used are for example purposes only and are not indications of factors being bid by the contractor.

K. Bonds

1.0 The amount of the Bid Bond shall be 5% of the anticipated budget for this project.

2.0 The amount of the Performance Bond shall be 100% of the anticipated budget for this project.

L. Notice to Proceed

Delete Sec 108.2 and substitute the following:

108.2 Notice to Proceed. For each Job Order, the engineer will include a notice to proceed, which will stipulate the date the contractor is expected to begin work. The notice to proceed date will normally be 14 calendar days after the job order is issued.

108.2.1 Job orders that require an accelerated response will normally have a notice to proceed of 5 calendar days after the job order is issued. Response time for accelerated repairs will commence at the time telephone contact is made with the contractor.

M. Completing the Work

1.0 The contractor shall perform any task in the fixed unit price list for the fixed unit price multiplied by the quantity, multiplied by the appropriate Adjustment Factor for tasks performed during Normal Working Hours or for tasks performed during Nighttime or Weekend hours. The contractor shall perform the Detailed Scope of Work for the Job Order Price as calculated in accordance with the procedure for developing Job Orders set forth herein.

2.0 When installed quantities differ from the estimated quantities in the issued Job Order, the as built quantities in the final Job Order will address the quantity variation(s) for final payment. When quantities are not specified in the Detailed Scope of Work, the Job Order Price will be deemed to be lump sum for such work.

3.0 The contractor shall employ and supply a sufficient force of workers, materials and equipment and shall progress the work with such diligence so as to ensure completion of the Detailed Scope of Work within the Job Order completion Time or within such extended time for completion as may be granted by the engineer.

4.0 In order to assist in reviewing the Job Order Price Proposal, the contractor shall as part of the Job Order Proposal prepare and submit to the engineer for approval, a progress schedule showing the order in which the contractor proposes to carry on the work, the date of which it will start the major items of work (including but not limited to excavation, drainage, paving, structures, mobilization, soil erosion and sediment control, etc.) and the critical features (including procurement of materials, plant and equipment) and the contemplated dates for completing the same.

N. Final Inspection and Acceptance of the Work

Delete Secs 105.10.7 through 105.10.7.2 and substitute the following:

105.10.7 Final Inspection. Upon completion of the required work for each Job Order, the contractor shall notify the engineer by phone, facsimile, or electronic mailing, and the engineer will perform an inspection. If the engineer determines all work required by the contract has been satisfactorily completed, the engineer will make the acceptance for maintenance and notify the contractor in writing of the date of acceptance for maintenance.

105.10.7.1 Work determined to be unsatisfactory by the engineer and not accepted shall be corrected to acceptable standards at the contractor's sole cost. All items that are unsatisfactory shall be corrected within the specified working days for each job order. If needed for correction of unsatisfactory work, the contractor will be given an extension of contract time in an amount equal to the number of working days remaining in the job order at the time the engineer was

notified for inspection. No contract time extension will be made for notification made prior to completion of the work. Any time extension given will be considered a non-compensable delay. Upon completion of the corrections, the contractor shall notify the engineer for a re-inspection.

105.10.7.2 Following a Job Order final inspection, the contractor, subcontractors, and suppliers are relieved of any new or additional liability to third parties for personal injury, death, or property damages which may be alleged to result from the performance of the work required by that job order, unless additional work on the right of way is required by the engineer.

105.10.7.3 Nothing in this section shall be deemed to excuse the contractor of liability or responsibility for any personal injury, death, or property damages which may arise from acts or the failure to act prior to the final inspection of the work required by the Job Order.

O. Liquidated Damages for Failure or Delay in Beginning Work and/or Completing Work on Time

1.0 Description. If the contractor, or in case of default, the surety fails to begin the work by the notice to proceed date or fails to complete the work within the mutually agreed schedule included in each job order, 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 delay, with its resulting cost to the traveling public. 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 **\$1000.00 per day** for each full day that the work is not started and **\$1000.00 per day** for each full day that the work is not completed within the required time periods. It shall be the responsibility of the engineer to determine the quantity of excess time.

2.0 The said liquidated damages specified for beginning work and/or completing work will be assessed in addition to any other applicable liquidated damages specified elsewhere in the contract documents.

P. Liquidated Damages Specified for Lane Closures – Contract Administration Costs

1.0 Description. The contractor shall be required to have all lanes open to unrestricted traffic and free of any equipment by the time specified in Job Order for each closure location. Should the contractor fail to have the roadway completely open, and free of any equipment by the time specified in Job Order, the Commission, the traveling public, state and local police and governmental authorities will be damaged in various ways, including but not limited to potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public. These damages will be assessed based on each Job Order amount and the chart below.

Contract Amount		Damages per Day
From	Up To and Including	
\$0	\$100,000	\$100
\$100,001	\$500,000	\$250
\$500,001	\$1,000,000	\$500
\$1,000,001	\$2,500,000	\$750
\$2,500,001	\$5,000,000	\$1,500
\$5,000,001	\$20,000,000	\$2,000
\$20,000,001	over	\$3,000

1.1 The said liquidated damages specified will be assessed in addition to any other liquidated damages charged under the Missouri Standard Specifications for Highway Construction, as indicated elsewhere in this contract.

1.2 This deduction will continue until such time as the necessary work is completed and traffic is restored.

2.0 A contingency plan mutually agreed upon by the contractor and the engineer shall be established at the joint meeting and documented in each Job Order in the event of a delay of the scheduled traffic opening time due to weather or other unforeseen circumstances.

Q. Contract Payments

1.0 The engineer will make semi-monthly payment estimates in writing for the Job Orders completed and final inspected during the semi-monthly interval and the value thereof at the price established in the Job Order, including any necessary adjustments. The semi-monthly estimates will include deductions from the contractor's invoice for any liquidated damages applicable to any of the Job Orders.

R. Work Zone Traffic Management

1.0 Description. The contractor shall be responsible for the work zone traffic management as mutually agreed upon by the contractor and engineer for each individual Job Order. 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.

2.0 Work Zone Scheduling.

2.1 The contractor shall notify the engineer at least 48 hours prior to performing any work at each work site. The notification shall include all information needed to identify traffic impacts such as work location, anticipated work hours, traffic control plan type, required lane or shoulder

closures, anticipated duration of the work, etc. The contractor shall designate a contact person who is available for the duration of the work to resolve any traffic impact issues resulting from the contractor's operations. The engineer will make appropriate notification to the public, MoDOT customer service, and MoDOT work crews of the contractor's operations. The contractor shall notify the engineer as soon as practical any postponement due to weather, material, or other circumstances and shall notify the engineer when the work has been rescheduled.

2.2 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 reopened to traffic.

2.3 Traffic shall be maintained through the work zone using the existing pavement. Provisions shall be made to allow the movement of emergency vehicles through the limits of construction at all times. During non-working hours the contractor shall have all lanes of traffic open for all routes, ramps, and side roads. All channelizers and other traffic control devices shall be removed from the roadway during non-working hours unless otherwise approved by the engineer.

2.4 The contractor shall be responsible for maintaining the existing traffic flow through the job site during construction. If disruption of the traffic flow occurs and traffic is backed up in queues of 15 minute delays or longer, then the contractor shall review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent queues from occurring again.

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

3.0 Work Hour Restrictions.

3.1 During non-working hours the contractor shall have all lanes of traffic open for all routes, ramps, and side roads. Working hours for weekends and holidays shall be determined by the engineer.

3.2 Due to the wide variance in traffic volumes throughout the contract area, it is not possible to give specific work hours for the term of the contract. Each Job Order will specify work hours or work hour restrictions based on the repair location, this may include peak hour restrictions.

Specific work hours for an individual work location shall be according to the mutually agreed upon schedule in the Job Order. All work shall be scheduled to avoid major sporting events, conventions, concerts, etc.

4.0 Basis of Payment. All items necessary to complete the traffic control will be paid for at the fixed unit price multiplied by the Normal, Nighttime or Weekend Adjustment Factor, as mutually agreed upon in the Job Order.

S. Traffic Control Plan Types

1.0 Description. The following traffic control plan types shall be used for the job orders issued for this contract.

2.0 Plan Types.

2.1 Right/Left Lane Closure. A right/left lane closure shall be performed by furnishing, installing, and removing the following set of traffic control devices.

2 each	Road Work Ahead
2 each	Right (Left) Lane Closed Ahead
1 each	Right (Left) Lane Closed
1 each	Merge with Right (Left) Arrow
4 each	Speed Limit XX MPH
6 each	Work Zone (Plaque)
2 each	Fine Sign
2 each	Speeding / Passing (Plate)
2 each	Do not Pass
2 each	Pass with Care
2 each	Flag Assembly
19 each	Directional Indicator Barricade
95 each	Channelizer (Trim Line)
1 each	Flashing Arrow Panel

2.2 Shoulder Closure (No Encroachment). A shoulder closure shall be performed by furnishing, installing, and removing the following set of traffic control devices.

2 each	Road Work Ahead
2 each	Shoulder Work Ahead
2 each	Flag Assembly
95 each	Channelizer (Trim Line)

3.0 Additional Traffic Control Devices. The engineer may determine that signs, channelizers, and Type III Movable Barricades in addition to those devices shown in the plans are necessary to safely accommodate traffic. These additional devices may be needed for merging ramp traffic, detours, multiple bridges, or other special cases to supplement the specified lane closure devices. The contract provides a fixed cost for any additional traffic control items.

4.0 Flaggers. Flaggers may be required when working at intersecting streets or ramps as directed by the engineer. No direct payment will be made for flaggers.

5.0 Method of Measurement and Basis of Payment.

5.1 Measurement of lane closures will be made per Job Order. Payment will be made for a maximum of one (1) of each lane closure type at a specific work site per job order. Payment will not be made for any lane closure that does not result in productive repair work as determined by the engineer. Additional lane closures may be installed by the contractor at his expense. The accepted quantity of each lane closure will be paid for at the fixed unit price for:

Item 616-99.02	Left/Right Lane Closure	Each
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Item 616-99.02 Shoulder Closure (No Encroachment) Each

multiplied by the Normal, Nighttime or Weekend Adjustment Factor, as mutually agreed upon in the Job Order.

5.2 Measurement of additional traffic control devices will be made per Job Order. Payment for the devices shall include furnishing, installing, and removing the additional devices at a specific work site. No payment will be made for additional devices used by the contractor without prior approval of the engineer. The accepted quantity of additional traffic control devices will be paid for in accordance with the fixed unit price list, multiplied by the Normal, Nighttime or Weekend Adjustment Factor, as mutually agreed upon in the Job Order.

T. Delay Provisions

1.0 If the contractor is delayed in the commencement, prosecution or completion of the work by any act of the Commission, or by any cause beyond the contractor's control, then the contractor will be entitled to an extension of time. If the contractor is delayed or prevented from working on a particular date as a result of a delay, error or omission of the Commission, and the contractor incurs unavoidable labor costs as a direct result thereof because the contractor did not have enough time to cancel or divert its labor force, then the contractor will be reimbursed for such costs. For each worker so paid, the contractor will be reimbursed the amount paid the worker. Also, the contractor will be reimbursed for construction tasks required as a direct result of such delay, error or omission, such as closing off areas of work. No other costs shall be paid as a result of a delay or late cancellation.

1.1 If the contractor fails to provide 48-hour notification prior to start of accelerated work or 5-days notification for all other Job Orders this provision will not apply.

U. Eliminated Materials

1.0 Materials required by the Detailed Scope of Work and not incorporated into the work due to changes caused by field conditions or revisions to the design by the Commission after the material was ordered or purchased will be reimbursed at the material portion of the Pre-priced Task, or if there is no Pre-priced Task, then its material cost minus salvage value, or the material cost plus delivery costs.

V. Sample Job Orders

1.0 The following are example Job Orders intended to be illustrations that may be used as a guide for formulating the bid of the Adjustment Factor. For each example Job Order, the appropriate items that would be used and the quantities are computed based upon the sample work that would be completed in the Job Order. The contractor shall be reminded these are Job Order samples and the quantity totals in actual Job Orders, if issued, may be more or less than that depicted below or be totally different from the samples illustrated.

1.1 Job Order Sample 1:

Item Description	Fixed Unit Price	Quantity	Price
Left/Right Lane Closure	\$2500.00	1 Each	\$2,500.00
Furnish & Place Type 2 Rock Blanket	\$30.00	1500 Ton	\$45,000.00
Permanent Erosion Control Geotextile	\$2.00	1550 S.Y.	\$3,100.00
Seeding – Cool Season Mixture	\$1200.00	0.5 Acre	\$600.00
Seeding – Warm Season Mixture	\$1200.00	1.8 Acre	\$2,160.00
Soil Biostimulant	\$4000.00	1.8 Acre	\$7,200.00
Fiber Reinforcement Matrix	\$4000.00	2.3 Acre	\$9,200.00
Rock Ditch Check	\$12.00	120 L.F.	\$1,440.00
Mobilization	\$6000.00	1 Each	\$6,000.00
		Subtotal:	\$77,200.00
Normal Work Factor	0.975		
		TOTAL:	\$75,270.00

1.2 Job Order Sample 2:

Item Description	Fixed Unit Price	Quantity	Price
Shoulder Closure (No Encroachment)	\$900.00	1 Each	\$900
Furnish & Place Type 2 Rock Blanket	\$30.00	70 Ton	\$2,100
Permanent Erosion Control Geotextile	\$2.00	93 S.Y.	\$186
Seeding – Cool Season Mixture	\$1200.00	0.1 Acre	\$600
Seeding – Warm Season Mixture	\$1200.00	0.5 Acre	\$600
Soil Biostimulant	\$4000.00	0.5 Acre	\$2,000
Fiber Reinforcement Matrix	\$4000.00	0.6 Acre	\$2,400
Rock Ditch Check	\$12.00	24 L.F.	\$288
Mobilization	\$6000.00	1 Each	\$6,000.00
		Subtotal:	\$15,074.00
Nighttime Work Factor	1.250		
		TOTAL:	\$18,842.50

W. Emergency Provisions and Incident Management

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

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

Missouri Highway Patrol Troop C	(636) 300-2800
Missouri Highway Patrol Troop E	(573) 840-9500
Missouri Highway Patrol Troop G	(417) 469-3121

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 police agency.

2.2 The contractor shall notify 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 enforcement and emergency agencies, a report shall be furnished to the engineer on the status of incident management.

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

X. Utilities

1.0 It is the inherent risk of the work under this contract that the contractor may encounter utilities above and/or below the ground or in the vicinity of any given job order which may interfere with their operations. The contractor expressly acknowledges and assumes this risk even though the nature and extent is unknown to both the contractor and the Commission at the time of bidding and award of the contract. The effect in cost or time of the presence of utilities above, below or in the vicinity of the contractor's work under this contract shall not be compensable.

2.0 The contractor will be responsible and is required to call for utility locates prior to performing any excavation work within any project limits for a given job order. Calling for utility locates will not relieve the contractor of his liability for utility damages caused by excavating operations performed by the contractor and/or any of his subcontractors. The contractor shall be solely responsible for all costs, fines, and penalties associated with the repair of any damaged utility caused by the actions of the contractor and/or any subcontractor within the given job order limits.

2.1 It shall be noted by the contractor that MoDOT is a member of Missouri One Call (800 Dig Rite). Some work on this project may be in the vicinity of MoDOT utility facilities, which includes but is not limited to traffic signal cables, highway lighting circuits, ITS cables, cathodic protection cables, etc. Prior to beginning work, the contractor shall request locates from Missouri One Call. The contractor shall also complete the Notice of Intent to Perform Work form located at the Missouri Department of Transportation website:

<http://www.modot.mo.gov/asp/intentToWork.shtml>

The contractor shall submit the form over the web (preferred method) or by fax to the numbers on the printed form. The notice must be submitted a minimum of 2 and a maximum of 10 working days prior to excavation just as Missouri One Call requires.

3.0 Any representation of the presence of utilities on any bidding document provided or job order issued under this contract is disclaimed by the Commission. The contractor fully understands this disclaimer when determining the basis of their bid for this contract. The contractor agrees to hold the Commission harmless in the presents or absents of any utility within the limits of any job order resulting from this contract.

Y. Supplemental Revisions JSP-18-01R

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.

COVID-19 Safety

1.0 Description. The coronavirus disease 2019 or COVID-19 has reached a pandemic stage across the United States, including the State of Missouri. To reduce the impact of COVID-19 outbreak conditions on businesses, workers, customers and the public, the contractor shall be aware of all COVID-19 guidance from the Center for Disease Control (CDC) and other government health mandates. The contractor shall conduct all operations in conformance with these safety directives. The guidance may change during the project construction and the contractor shall change and adapt their operation and safety protocols accordingly.

2.0 Safety Plan. The contractor shall include these procedures in the project safety plan as called for in the contract documents and revise the safety plan as needed.

3.0 Essential Work. In accordance with any state or local Stay at Home Order, care for the infrastructure has been deemed essential and MoDOT is moving forward with construction projects, this project is considered essential and the contractor and their employees, subcontractors and suppliers are considered essential business and performing essential functions.

4.0 Basis of Payment. Compliance with regulations and laws pertaining to COVID-19 is covered under Sec 107 of the Missouri Standard Specifications for Highway Construction. No direct payment will be made for compliance with this provision.

Anti-Discrimination Against Israel Certification

By signing this contract the Company certifies it is not currently engaged in and shall not, for the duration of the contract, engage in a boycott of goods or services from the State of Israel, companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel, or persons or entities doing business in the State of Israel as defined

by Section 34.600 RSMo. This certification shall not apply to contracts with a total potential value of less than One Hundred Thousand Dollars (\$100,000) or to contractors with fewer than ten (10) employees.

Delete Sec 413.30.2.3 and substitute the following:

413.30.2.3 Reclaimed Asphalt. No reclaimed asphalt pavement or reclaimed asphalt shingles are allowed.

Z. Damage to Existing Pavement

1.0 Description. This work shall consist of repairing any damage to existing pavement, ramps and/or shoulders caused by contractor operations. This shall include damage caused either directly or indirectly by contractor operations, including but not be limited to, damage caused by the traffic during contractor operations.

2.0 Construction Requirements. Any cracking, gouging, or other damage to the existing pavement, ramps and/or shoulders, side roads, or entrances from general construction shall be repaired within twenty four (24) hours of the time of damage at the contractor's expense. Repair of the damaged pavement, shoulders, side roads, or entrances shall be as determined by the engineer.

3.0 Method of Measurement. No measurement of damaged pavement, ramps or shoulder areas as described above shall be made.

4.0 Basis of Payment. No payment will be made for repairs to existing pavement, ramps and/or shoulders damaged by contractor operations.

AA. Mobilization

Delete Sec 618.2 and substitute the following:

618.2 Method of Measurement and Basis of Payment. Mobilization will be measured and paid for once on each Job Order regardless of the number of work days required to complete the work. Additional mobilizations for seeding may be made, as determined by engineer. Payment will be made for mobilization as follows:

Item 618-99.02	Mobilization	Each
Item 618-99.02	Mobilization	Each

BB. Previous Job Order Information

1.0 Previous Job Orders. Job order information, consisting of quantities and pay items that were issued for past contracts will be available from the Project Contact upon the bidder's written request. This information does not constitute part of the bid or contract documents. It is provided for the bidder's use during bid preparation, and shall not be considered a representation of actual job orders to be issued during construction for this contract. Furnishing

this information does not relieve a bidder or contractor from the responsibility of estimating the number and types of job orders that will be issued for future contracts. The bidder or contractor shall assume the risk of error if the information is used for any purposes for which the information was not intended. The Commission makes no representation as to the accuracy or reliability of the information, since the information may not be representative of the sealed contract documents. Any assumptions the bidder or contractor may make from this information is at the bidder or contractor's risk; none are intended by the Missouri Highways and Transportation Commission. The bidder or contractor assumes the sole risk of liability or loss if the bidder or contractor does rely on this information to its detriment, delay or loss.

CC. Railroad Requirements

1.0 The right of way of various Railroads, herein called "Railroad", are located within the limits of this project. However, this project has been developed with the specific intention that no involvement with the Railroad's facilities, traffic or right of way is required for the performance of the contractual work herein. The work to be performed over the Railroad's right of way shall not interfere with the Railroad's operations or facilities. Under these circumstances, the requirements of Sec 104.12.3, Sec 104.12.8 through 104.12.10.5 (inclusive), and Sec 107.13.4 shall not apply.

2.0 Should the contractor violate this condition of no railroad involvement, all terms and conditions of the interaction with the Railroad shall be solely between the Railroad and the contractor.

DD. Modified Linear Grading, Class 2

1.0 Description. Modified Linear Grading, Class 2, shall consist of all excavation, Contractor furnished fill, embankment construction, grading of rilled slopes, and final shaping necessary to restore roadway slopes to their original condition.

2.0 Construction Requirements.

2.1 It may be necessary to go outside the limits of the right of way to obtain additional material. All Contractor furnished material shall be approved by the Engineer prior to being incorporated into the project.

2.2 The Engineer shall have sole discretion in determining whether excess material may be incorporated within right-of-way or must be disposed of outside of right-of-way.

2.3 To properly construct the project, it may be necessary to transport equipment and material to and perform work from the top of high slopes and around rock outcroppings.

2.4 All areas to be graded shall be cleared and grubbed in accordance with Sec 201 or as directed by the Engineer. No measurement or payment will be made for clearing and grubbing.

2.5 Grading operations shall not result in the covering of existing drainage structures, such as culverts, inlets, and pavement edge drain outlets.

2.6 Any damage to existing drainage structures or existing pavement, resulting from the Contractor's operations, shall be repaired at the Contractor's expense and to the satisfaction of the Engineer.

3.0 Method of Measurement. Measurement will be made to the nearest 10 feet separately for each length of slope measured along the centerline of the traveled way and totaled to the nearest 100 feet for the sum of all segments.

4.0 Basis of Payment. All costs incurred by the Contractor to comply with this provision shall be considered completely covered by the contract unit price for Item 207-99.09, Misc. Modified Linear Grading, Class 2. No direct payment will be made for Contractor furnished material or disposal of excess material.

EE. Furnishing and Placing Type 2 Rock Blanket

1.0 Description. Revise Sec 611.30.4 and 611.30.5 and substitute the following:

611.30.4 Method of Measurement. The weight will be determined by weighing each truck load on scales in accordance with Sec 310. Measurement will be made to the nearest 0.1 ton for the total tonnage of material accepted and complete in place.

611.30.5 Basis of Payment. All costs of securing the source, quarrying, excavating, breaking, hauling, and placing the material at locations specified will be paid for and completely covered by the contract unit price for Furnishing and Placing Rock Blanket, per ton.

FF. Furnishing and Placing Type 1 and Type 2 Rock Ditch Liner

1.0 Description. Revise Sec 609.60.4 and 609.60.5 and substitute the following:

609.60.4 Method of Measurement. The weight will be determined by weighing each truck load on scales in accordance with Sec 310. Measurement will be made to the nearest 0.1 ton for the total tonnage of material accepted and complete in place.

609.60.5 Basis of Payment. All costs of securing the source, quarrying, excavating, breaking, hauling, and placing the material at locations specified will be paid for and completely covered by the contract unit price for Furnishing and Placing Rock Ditch Liner, per ton.

GG. Additional Hauling Per Ton (Dunklin, Pemiscot, Mississippi, New Madrid Counties Only)

1.0 Description. Due to the additional hauling distances from any sourced rock, an additional price per ton will be added in Dunklin, Pemiscot, Mississippi and New Madrid Counties.

2.0 Method of Measurement. The weight will be determined by weighing each truck load on scales in accordance with Sec 310. Measurement will be made to the nearest 0.1 ton for the total tonnage of material accepted and complete in place.

3.0 Basis of Payment. The additional hauling distance will be paid for and completely covered by the contract unit price for Additional Hauling Per Ton (Dunklin, Pemiscot, Mississippi, New Madrid Counties Only), per ton for associated Item numbers 6119910 only. This adjustment will not apply to material sourced/obtained on-site or within the counties listed in the description 1.0 above.

HH. Fertilizing, Seeding, And Mulching

1.0 Fertilizing.

1.1 Soil Neutralization. In accordance with Sec 801, the application of effective neutralizing material shall be according to the table below. No direct payment will be made for the soil neutralization.

1.2 Commercial Fertilizer. In accordance with Sec 801, the following fertilizers shall be applied at the rate specified. No direct payment will be made for fertilizer.

	Pounds per Acre			
	Nitrogen (N)	Phosphorous (P ₂ O ₅)	Potash (K ₂ O)	Effective Neutralizing Material
Beyond 30'	80	320	80	2,100
Within 30'	40	160	40	1,400

2.0 Seeding. In accordance with Sec. 805, the following seed mixture shall be applied at the rate specified:

Cool Season Mixture Within the First 30 Feet Pounds Pure Live Seed (PLS) per Acre	
Tall fescue	80 lbs.
Annual ryegrass	5 lbs.
Perennial ryegrass	6 lbs.
Teff grass	5 lbs.
White clover	6 lbs.
Oats	5 lbs.
TOTAL	107 PLS lbs/acre

Warm Season Mixture Beyond the First 30 Feet and Steeper Than 3:1 Slopes Pounds Pure Live Seed (PLS) per Acre	
Indiangrass	6 lbs.
Big bluestem	4 lbs.
Little bluestem	5 lbs.
Sideoats grama	4 lbs.
Switchgrass	2 lbs.

Virginia or Canada rye	2 lbs.
Tall dropseed	0.5 lbs.
Purple prairie clover	0.5 lbs.
Annual ryegrass	5 lbs.
Teff grass	5 lbs.
Perennial ryegrass	5 lbs.
Red fescue	5 lbs.
Tall fescue	10 lbs.
Redtop	1.5 lbs.
Partridge pea	3 lbs.
White clover	5 lbs.
Gray headed coneflower OR Lance-leaf Coreopsis	0.25 lbs.
Black-eyed Susan	0.25 lbs.
Oats	5 lbs.
TOTAL	69 PLS lbs/acre

3.0 Cover. Seeded and fertilized areas shall be covered with Fiber Reinforced Matrix.

II. Soil Biostimulants

1.0 Description. Preliminary soil testing indicated that the existing soil has an organic matter content of 0.7%. This work shall consist of furnishing and installing a hydraulically applied biotic soil amendment and a hydraulically applied soil penetrating growth accelerator at all locations that will be seeded. The biotic soil amendment shall be designed as an alternative to topsoil and/or compost to accelerate development of depleted soils with low organic matter, low nutrient levels. The soil penetrating growth stimulator shall accelerate seed germination and improve moisture infiltration and retention.

2.0 Material.

2.1 Biotic Soil Amendment. The biotic soil amendment shall be non-toxic and weed seed free and provided the needed organic material, micronutrients, and fungi needed to suitable vegetation growth. The following products will be acceptable:

Manufacturer	Product
Profile Products LLC	ProGanics™ BSM
Sunmark Environmental LLC	PermaMatrix® BSA Hydro
Verdyol	Biotic Earth™ Black
LSC Environmental Products LLC	Organix™ BSA

2.2 Soil Penetrating Growth Accelerator. The growth accelerator shall contain soil-penetration agents, nutrients, and microorganisms to improve moisture infiltration and retention, promote faster nutrient uptake, and provide a hormonal plant response to maximize root development and plant stress tolerance. The following product will be acceptable:

Manufacturer	Product
Profile Products LLC	ProPlus® JumpStart™

2.3 All components shall be pre-packaged by the manufacturer to ensure both material performance and compliance with the manufacturer's specifications. The packaged material shall be labeled with the following information:

- Manufacturer's name, location, and contact information
- Product name and product ID
- Product physical composition

2.4 Any mixing of materials shall conform to manufacturer's specifications. Mixing of fertilizer, seed, lime with the materials shall be in accordance with manufacturer's recommendations.

3.0 Submittals. If the Contractor selects a product from the above table or furnishes an approved equivalent, the manufacturer's product specifications sheet and installation instructions shall be submitted to the engineer, for verification with this provision and approval, at least 14 days prior to incorporating the material into the project. This submittal shall include the manufacturer's required substrate preparation, application rates, and storage requirements

4.0 Construction Requirements.

4.1 Materials shall be stored and handled in strict compliance with manufacturer's recommendations. The material shall be protected from damage, weather, and excessive temperatures changes.

4.2 The materials shall be mixed and installed in accordance with manufacturer's instructions, recommendations, and application rates.

4.3 The material shall be applied from opposing directions to ensure optimum surface coverage and prevent the "shadow" effect.

5.0 Method of Measurement. Measurement of Soil Biostimulant will be of the area covered by Soil Biostimulant to the nearest 1/10 acre.

6.0 Basis of Payment. The accepted quantity of Soil Biostimulant will be paid for at the contract unit price for item 805-99.19, Soil Biostimulant, per acre.

JJ. Fiber Reinforced Matrix (FRM)

1.0 Description. Fiber Reinforced Matrix (FRM) is a hydraulically applied (spray-on) erosion control product that bonds to, blankets, and conforms to contours of bare soil. It is typically applied with a truck or trailer mounted sprayer or by walking the affected areas with a hose sprayer. FRM is composed of organic defibrated fibers, cross-linked insoluble hydro-colloidal tackifiers, and reinforcing natural and /or synthetic fibers.

2.0 Materials.

2.1 To ensure product quality and performance, the Contractor shall provide FRM that meets the specifications as provided in the table below. Do not use materials listed for use as Hydraulic Mulch (HM), Stabilized Mulch Matrix (SMM), or Bonded Fiber Matrix (BFM).

2.2 Furnish a FRM that requires no curing period and when applied bonds to the soil.

2.3 Use of materials that are composed of paper, cellulose fiber, or a mixture of paper, cellulose, and other materials are not allowed.

2.4 Seed, lime, and fertilizer may be added to the FRM mixture in accordance with the manufacturer's recommendation.

2.5 Provide FRM that is pre-packaged by the manufacturer and is labeled with the following information.

- Manufacturer's name, location, and contact information,
- FRM name and product ID,
- FRM physical composition.

2.6 Manufacturer's certification shall be provided stating that the provided FRM meets the requirements as listed in the table below.

Minimum FRM Performance and Physical Requirements Property			Required Value
Thermally Processed Fiber by Weight			75% ± 10%
100% bio-degradable Interlocking Fibers			5% ± 2%
Organic Tackifiers and Activators			10% ± 2%
Moisture Content			10% ± 3%
Organic Matter			90% minimum
Color			Colored to contrast application area; shall not stain concrete or painted surfaces.
FRM Property		Test Method	Required Value
Physical	Mass Per Unit Area	ASTM D6566*	12.0 oz/yd ² minimum
	Thickness	ASTM D6525*	0.22 in. minimum
	Ground Cover	ASTM D6567*	99% minimum
	Wet Bond Strength	ASTM D6818*	9 lb/ft
	Water Holding Capacity	ASTM D7367	1500% minimum
	Flexural Rigidity (wet)	ASTM D6575*	5 oz-yd maximum
Endurance	Functional Longevity	ASTM D5338	Minimum of 12 months
Performance	Cover Factor	MoDOT Approved Large Scale Testing	0.01 maximum
	% Effectiveness	MoDOT Approved Large Scale Testing	99% minimum
	Cure time	MoDOT Approved Large Scale Testing	98% Effective 2 hours after application
	Vegetation Establishment	ASTM D7322*	800% minimum
Environmental	Ecotoxicity	EPA 2021.0	96-hr LC50 > 100%
	Effluent Turbidity	MoDOT Approved Large	100 NTU Maximum

		Scale Testing	
	Biodegradability	ASTM D5338	100% Minimum
* ASTM test methods developed for Rolled Erosion Control Products (RECPs) that have been modified to accommodate Hydraulic Erosion Control Products (HECPs).			

3.0 Construction Requirements.

3.1 Manufacturer's representative shall be on site the during the first day off application to provide guidance in the proper application of the FRM.

3.2 FRM shall be applied to all finished slopes as soon as practical and within the requirements of MoDOT's Storm Water Pollution Prevention Plan. FRM shall be applied in accordance with the manufacturer's specifications to assure complete surface coverage of disturbed slopes. In order to provide maximum coverage and eliminate the "shadow effect", the FRM shall be applied from multiple, varying directions.

3.3 Application rates provided by the manufacuter shall be followed. If no rates are supplied, application rates shall be in accordance with the following table.

Slope Condition	Application Rate (lbs/Acre)
< 3H:1V	3000
≥ 3H:1V and < 2H:1V	3500
≥2H:1V and < 1H:1V	4000
≥1H:1V	4500

4.0 Method of Measurement. Measurement of FRM will be of the area covered by FRM to the nearest 1/10 acre.

5.0 Basis of Payment. The accepted quantity of FRM will be paid for at the unit price bid for item 805-99.19, Fiber Reinforced Matrix, per acre.

KK. Environmental Review Requirement

1.0 Description. This project includes undetermined locations throughout southeast Missouri. This area of the state contains many sensitive species (including federally and state listed), protected streams, communities of conservation concern, and protected cultural and historic resources. It is the intent of this JSP, to maintain compliance with state and federal law. In order to achieve this goal, it is important it avoid negative impacts to any sensitive or protected resources that may be present, locations and impact of work must be reviewed by MoDOT Environmental and Historic Preservation Specialists before issuance of a Job Order.

2.0 Notification. When a location is selected for a Job Order at any of the locations included in this project, the engineer shall contact the Environmental and Historic Preservation section so the specialists listed below may review each location for impacts to sensitive and protected resources. The notification shall include the project location (county, route, and log mile or KMZ file), project impact (clearing, grading, stabilization), downstream waterbody and distance to stream, project timeline (start date, construction days), and locations of all easements and new right of way. This review and subsequent clearance of each location shall occur prior to issuance of a Job Order. Please notify:

Job No.: J9P3629
Route: Various
Counties: Various

Georganne Bowman (Environmental) Office: 573-526-5649 Cell: 573-508-3136
Georganne.Bowman@modot.mo.gov

Marianne McGlinn (Historic Preservation) Office: 573-526-7836 Cell: 573-508-2221
Marianne.McGlinn@modot.mo.gov

3.0 Restrictions. The following restrictions will ensure that MoDOT adheres to all environmental regulations as required by federal law.

3.1 Tree Clearing. No tree clearing is permitted for any activity without prior coordination with MoDOT Environmental.

3.2 Erosion Control. Erosion control measures shall be implemented in order to reduce suspended solids, turbidity and downstream sedimentation that may enter the ecosystem of any cave, surface water, or ground water sink.

3.3 Work Near Water Bodies Work shall not be allowed below the ordinary high water elevation of any stream or lake. No work will be allowed in any wetlands. Personnel shall not drive or place any equipment in any waterway. Coordination with the Design - Environmental Section, and permitting and consultation with regulatory agencies, is required prior to any proposed activity below ordinary high water elevation or within a wetland.

4.0 Basis of Payment. No direct pay shall be provided for any labor, equipment, time, or materials necessary to complete this work. The contractor shall have no claim, or basis for any claim or suit whatsoever, resulting from compliance with this provision.

LL. Protective Measures For Ditch Work In Illinois Chorus Frog Breeding Areas

1.0 Description. There are areas of herpetofaunal significance along and adjacent to the project corridor. Roadside ditches, wet fields, and streams have been shown to support populations of Illinois chorus frog, a species of conservation concern and candidate for federal listing. General breeding dates for Illinois chorus frog are February to early April; tadpoles develop into sub-adult frogs by May or June. To ensure protection of this species and other sensitive aquatic species that may be present, the following seasonal restrictions must be adhered to.

2.0 Restrictions. Personnel shall take all precautions to prevent negative impacts to aquatic and semi-aquatic species along the project corridor, including Illinois chorus frog. If a ditch adjacent to the roadway has standing water, then any work in the ditch (including land disturbance, grading, equipment/vehicle staging and storage, or refueling) shall take place between mid-summer (July 15) and winter (January 15), in order to minimize potential impacts to Illinois chorus frog.

3.0 Basis of Payment. No direct payment will be made to the Contractor to recover the cost of labor, materials, or equipment required to comply with the above requirements.