

Job No.: J6S3429 J6S3429B
Route: I-70 I-70
Counties: St. Louis City St. Louis City

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(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 NO.: J6S3429 & J6S3429B ST LOUIS CITY, MO DATE PREPARED: August 30, 2021
	ADDENDUM DATE:
Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: All	

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JOB
SPECIAL PROVISION

A. General - Federal JSP-09-02G

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 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. Contract Liquidated Damages JSP-13-01B

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 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.

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Notice to Proceed: January 3, 2022
Completion Date: June 30, 2023

2.1 Calendar Days. 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
J6S3429	N/A	\$11,400
J6S3429B	N/A	\$11,400

3.0 Liquidated Damages for Contract Administrative Costs. Should the contractor fail to complete the work on or before the 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 **\$1500** 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 above specified 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 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-02-06J

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 10 minutes to prevent congestion from escalating to 15 minute or above threshold. If disruption of the traffic flow occurs and traffic is backed up in queues of 15 minute delays or longer, 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.

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.

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 July 2, 2021 – 6:00 a.m. July 6, 2021
12:00 noon July 1, 2022 – 6:00 a.m. July 5, 2022
12:00 noon June 30, 2023 – 6:00 a.m. July 5, 2023

3.1.2 Special Events.

There may be 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, 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 Any work requiring a reduction in the number of through lanes of traffic shall be completed during the following hours.

Single Lane Closures on Interstate:

Eastbound I-70

Monday through Saturday: 8:00 a.m. - 5:00 p.m.
Sunday Hours: No Restrictions

Westbound I-70

Monday through Friday: 8:00 a.m. - 5:00 p.m.
Weekend Hours: No Restrictions

Ramp 2 from I-70E to Route N / Florissant Rd (beneath Bridge A6168)

Monday through Friday: 6:00 a.m. - 8:00 p.m.
Weekend Hours: No Restrictions

Double Lane Closures on Interstate:

Eastbound I-70

Monday through Friday: None
Weekend Hours: No Restrictions

Westbound I-70

Monday through Friday: None
Weekend Hours: No Restrictions

Lane Closures on Overhead Routes:

Goodfellow Blvd

Single Lane Closure: 6:00 a.m. - 6:00 p.m. Monday through Friday
Double Lane Closure: 6:00 a.m. - 1:00 p.m. Monday through Friday
Weekend Hours: No Restrictions

Union

Single Lane Closure: 6:00 a.m. - 8:00 p.m. Monday through Friday
Double Lane Closure: N/A
Weekend Hours: No Restrictions

Kingshighway

Single Lane Closure: 6:00 a.m. - 8:00 p.m. Monday through Friday
Double Lane Closure: N/A
Weekend Hours: No Restrictions

West Florissant

Single Lane Closure: 6:00 a.m. - 8:00 p.m. Monday through Friday
Double Lane Closure: N/A
Weekend Hours: No Restrictions

Taylor

Single Lane Closure: 6:00 a.m. - 8:00 p.m. Monday through Friday
Double Lane Closure: N/A
Weekend Hours: No Restrictions

Carrie Ave

Single Lane Closure: 6:00 a.m. - 8:00 p.m. Monday through Friday
Double Lane Closure: N/A
Weekend Hours: No Restrictions

Adelaide Ave

Single Lane Closure: 6:00 a.m. - 8:00 p.m. Monday through Friday
Double Lane Closure: N/A
Weekend Hours: No Restrictions

McKinley St

Single Lane Closure: 6:00 a.m. - 8:00 p.m. Monday through Friday
Double Lane Closure: N/A
Weekend Hours: 6:00 a.m. - 8:00 p.m. Saturday & Sunday

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Salisbury St

Single Lane Closure: 6:00 a.m. - 8:00 p.m. Monday through Friday
Double Lane Closure: N/A
Weekend Hours: No Restrictions

3.4 Bridge Closures. Weekend closures will be allowed for the following bridges to complete any work that cannot be done while maintaining both lanes of traffic on the structure:

Bridge A6167 Bermuda Drive
Bridge A6206 Shreve Avenue
Bridge A0139 Madison Street

Allowable closure times for these structures are as follows:
7:00 p.m. Friday - 7:00 a.m. Monday

3.4.1 Bridge A0141 St. Louis Avenue. The contractor shall adhere to the following requirements regarding the closure of the St. Louis Avenue bridge:

- (a) Closure shall not be done while the Ames VPA Elementary School at 2900 Hadley Street is in session, which is typically from August 15th to May 27th.
- (b) Closure shall not be done at the same time as the closure of the Madison Avenue bridge.
- (c) The contractor will be allowed to keep St Louis Avenue closed for two weekends plus the week in between. Allowable closure time will be from 7:00 pm Friday to 7:00 am Monday of the following weekend.

3.5 The contractor shall not alter the start time, ending time, or a reduction in the number of through lanes of traffic **on I-70** 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 **on I-70**, 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 **\$1000 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.

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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. The CMS shall be capable of communication with the Transportation Management Center (TMC), if applicable, 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 on the overpass bridges, except for those bridges specified for weekend closures, and 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.

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. Liquidated Damages Specified

1.0 Description. If all work requiring bridge closures is not complete and open to traffic within the allowable closure times in the table below, the Commission, the traveling public, and 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.

2.0 Liquidated Damages Specified for Failure to Complete Work on Time. These costs are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount shown in the table below per day for each full day that all that all traffic lanes are not fully open on the streets as specified elsewhere in this special provision. It will be the responsibility of the engineer to determine the quantity of excess closure time.

WORK	Completion Date or Closure Time Allowed	Liquidated Damages
Bridge A6167 (Bermuda Dr.)	1 weekend	\$4,650 per day
Bridge A6206 (Shreve Ave.)	1 weekend	\$6,310 per day
Bridge A0139 (Madison St.)	1 weekend	\$1,240 per day
Bridge A0141 (St. Louis Ave.)	2 weekends including the week in between	\$4,095 per day

2.1 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.

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

E. 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 State Highway Patrol
Troop C Headquarters
891 Technology Dr.
Weldon Spring, MO 63304
(636) 300-2800

St. Louis Metropolitan Police Department
South Patrol Division
3157 Sublette Ave.
St. Louis, MO 63139
(314) 444-0100

Saint Louis University Hospital
3635 Vista Ave.
St. Louis, MO 63110
(314) 577-8000

Barnes-Jewish Hospital
1 Barnes-Jewish Hospital Plaza
St. Louis, MO 63110
(314) 747-3000

St. Louis City Fire Department Headquarters
1421 N. Jefferson Ave.
St. Louis, MO 63106
(314) 533-3406

St. Louis City Tow Lot/Towing Services
7410 Hall St.
St. Louis, MO 63147
(314) 383-7546

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MoDOT Transportation Management Center (TMC)
14301 South Outer 40 Rd.
Chesterfield, MO 63017
(314) 275-1500

St. Louis County Police, Fire and EMS	
St. Louis County Police	314-889-2341
City of Berkeley	314-524-3311
City of Cool Valley	314-889-2341
City of Normandy	314-385-3300
City of Berkeley Fire Department	314-524-3566

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.

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

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

Alvin Nieves-Rosario, Project Manager
MoDOT, St. Louis District
1590 Woodlake Drive
Chesterfield, MO 63017

Telephone Number: 314-453-1839
Email: alvin.nieves-rosario@modot.mo.gov

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

G. Traffic Management Coordination

1.0 Description. The contractor shall coordinate traffic management between this project and any other projects on I-44 and I-70, and projects which affect I-44 and I-70, including all future projects. The contractor shall be aware of the following jobs:

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J6S3272, J6S3638 – I-44/70 Broadway Bridge and Reversible Lane Exit Bridge Replacement (A0134)

J6I3541 – Bridge Washing, I-70 (A6500)

J6I3424 – I-70 Resurfacing, Branch to Biddle / Signal & ADA improvements on 9th Street at McKinley and Salisbury, and 11th Street at McKinley and Salisbury

J6I3463 – I-70 Structural Sign Improvements

J6M3413 & J6M3414 – Girder repairs on Bridge A5986 (Taylor Ave over I-70) and Bridge A5895 (I-70 over Grand)

1.1 This list of projects is not all inclusive. The contractor shall be aware that there may be other projects including, but not limited to, utility, St. Louis County, St. Louis City, private, MoDOT maintenance, permit, or other projects that may impact project construction or traffic control in the vicinity of this project. It shall be the responsibility of the contractor to determine what, if any projects other than the ones listed above may impact this project and work to coordinate construction and traffic management efforts between this project and any other project involved.

1.2 Each Contractor shall conduct their work so as not to interfere with or hinder the progress or completion of the work being performed by other Contractors. In case of dispute, the Engineer shall be the referee and the Engineer's decision shall be final and binding on all.

2.0 Site Construction. The Contractor shall arrange the work and shall place and dispose of the materials being used so as not to interfere with the operations of the other contractors.

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 the above provisions, unless specified elsewhere in the contract document.

H. Restrictions for Migratory Birds NJSP-16-06A

1.0 Description. Swallows or other bird species protected by the Migratory Bird Treaty Act may be nesting under the bridge or bridges that will be repaired under this contract.

2.0 Restrictions. To comply with the Migratory Bird Treaty Act, nests of protected species cannot be disturbed when active (eggs or young are present). Generally, nests are active between April 1 and July 31, but active nests can be present outside of these dates.

3.0 Avoidance Measures. The contractor shall not disturb active nests or destroy adults, eggs or young birds. In an effort to comply with the Migratory Bird Treaty Act, the contractor operations will be limited to the options established in the following sections.

3.1 Inactive or Partially Constructed Nests. If nests are present and MoDOT determines that the nests are inactive or partially constructed, the contractor may remove the nests provided that the colony's inactive or partially constructed nests are completely removed by March 15 and the contractor maintains a nest free condition until the bridge work is complete. Dry removal methods shall be used when practicable. If dry removal is not practicable, hydro cleaning may be used if approved by the Engineer and only if water is free of blasting grit, chemicals, or detergents, and applied using pressure less than 5,000 PSI. Clean water such as that from municipal water treatment plants or wells shall be used. Use of source water from Waters of the

State (i.e., streams or lakes), is allowable, if the appropriate methods to prevent the possible spread of invasive aquatic species are implemented.

3.2 Water and Equipment Used for Hydro cleaning. Aquatic invasives such as zebra mussels and some algae species have infested several bodies of water in the United States and can be transported by vessels (barges, boats, tugs, tankers, etc.) and equipment (tanks, tubing, pumps, etc.) that have been used in areas that contain these invasive species. If equipment is not properly inspected and treated to prevent the spread of invasives, these species can be introduced into areas not currently known to have a population. These invasive species are detrimental to existing ecosystems and can outcompete native species. To assist in preventing the introduction and spread of aquatic invasive species through MoDOT projects in Missouri streams and lakes, the following precautions shall be followed.

3.2.1 Use of Water from Streams, Lakes or Ponds. Contractors shall not use water for nest removal from streams, lakes or ponds, unless they have implemented appropriate methods to prevent the possible spread of invasive aquatic species. Water sources from municipal water treatment plants or wells may be used without following these measures provided the equipment to be used has not previously contained waters from streams, lakes or ponds. If the equipment has previously contained waters from other streams or lakes, the following measures must be implemented prior to use.

3.2.1.1 Equipment Washing. Prior to the use or re-use of equipment following any use with water from streams, lakes or ponds, all equipment shall be washed and rinsed thoroughly with hard spray (power wash) and hot (minimum 120° F) water, for at least one minute.

3.2.1.2 Equipment Treating or Drying. Equipment shall be treated or dried in one of the following manners.

3.2.1.2.1 Equipment interior and/or other surfaces shall be treated with a 10% bleach solution to kill any aquatic nuisance species. This solution must also be run through all intake lines and hoses, to sterilize interior components. When chlorine treatment is used, all chlorine runoff from equipment washing must be collected and properly treated and/or disposed of in accordance with Sec 806.

3.2.1.2.2 Equipment interior and/or other surfaces shall be treated with 140° F water for a minimum of 10 seconds contact on all surfaces. 140 ° F water must also be run through all intake lines and hoses, to purge any standing water.

3.2.1.2.3 Equipment shall be flushed of all non-municipal water, and dried thoroughly, in the sun before using in or transporting between streams and lakes. Dry times will depend on the season the equipment is being used. Equipment must dry a minimum of 7 days for June-September, 18 days for March-May; 18 days for October-November, and 30 days for December-February. The drying method should be reserved as a last resort option.

3.2.2 Prior to use of equipment, contractors shall provide the MoDOT inspector written documentation of the equipment's geographic origin (including the water body it was last used in), as well as defining the specified treatment method used to adequately ensure protection against invasive species. The written documentation will include a statement indicating the contractor is aware of these provisions and will also treat the equipment appropriately after completion of the project.

3.3 Active Nests. The contractor may work on the bridge if active nests are present, as long as the work does not impact or disturb the birds and/or nests. At a minimum, work shall not be performed within 10 feet of an active nest; however, the contractor is responsible for ensuring their activities do not impact the nests, eggs, or young.

4.0 Additional Responsibilities. If active bird nests remain after all reasonable avoidance measures have been taken, or if bird nests are observed during project construction, the contractor shall notify the Resident Engineer and contact the MoDOT Environmental Section (573-526-4778) to determine if there are other allowable options.

I. Utilities JSP-93-26F

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:

<u>Utility Name</u>	<u>Known Required Adjustment</u>	<u>Type</u>
Ameren Missouri Russ Robertson Telephone: 314.992.9804 Email: rrobertson2@ameren.com	See 3.0	Electric
AT&T Distribution Tonya Wells Telephone: 636.448.9607 Email: Tw2745@att.com	None	Communications
CenturyLink Communications Dave Vega Telephone: 516.712.3041 Email: david.vega@centurylink.com	None	Communications
Charter Communications George Bugg Telephone: 314.780.2921 Email: george.bugg@charter.com	None	Communications
City of St. Louis Water Michael Kelly Telephone: 314.633.9034 Email: mdkelly@stlwater.com	None	Water
City of St. Louis Traffic Len Efthim (Lighting) Telephone: 314.647.3111 Email: efthiml@stlouiscity.com	None	Lighting

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Metropolitan Sewer District Elbert Jaquess Jr. Telephone: 314.768.6315 Email: ejacquess@stlmsd.com	None	Sewer
Spire Energy Richard Frock Telephone: 816.472.3489 Email: richard.frock@spireenergy.com	None	Gas
Verizion/ADB Jeremy Phillips Telephone: 636.399.1023 Email: jeremy.phillips@verizion.com	None	Communications

1.1 The existence and approximate location of utility facilities known to exist, as shown on the plans, are based upon the best information available to the Commission at this time. This information is provided by the Commission "as-is" and the Commission expressly disclaims any representation or warranty as to the completeness, accuracy, or suitability of the information for any use. Reliance upon this information is done at the risk and peril of the user, and the Commission shall not be liable for any damages that may arise from any error in the information. It is, therefore, the responsibility of the contractor to verify the above listing information indicating existence, location, and status of any facility. Such verification includes direct contact with the listed utilities.

2.0 Project Specific Provisions: The Contractor shall be aware there are numerous utilities present along the routes in this contract. The locations listed below are not to be considered all inclusive.

3.0 Ameren Overhead Power lines. The contractor shall discuss the planned work as it relates to any energized power lines with Ameren Missouri and coordinate with Ameren Missouri for the installation of any insulation covers over the lines and/or any other designated requirements. Please note Ameren Missouri has revised the policy regarding the charges for placement, length of use and relocation of covers. The contractor is advised to contact Ameren Missouri regarding the current policy and so the anticipated cost to the contractor can be estimated and when payment is required. The Contractor shall contact Ameren Missouri at least two weeks in advance of when construction work is scheduled to begin to request covers to be placed at a given location.

Contractor shall directly contact Ameren Missouri to verify location of facilities. The contractor shall coordinate construction activities with Ameren Missouri and take measures to ensure the integrity of the existing facilities are not disturbed. The contractor shall protect the integrity of any existing facility in close proximity to contract work while performing construction activities.

There will be no direct pay for compliance to any of the above provisions. Payment will be made directly to Ameren for the above requirements.

The Commission cannot warrant the information above which was provided by Ameren Missouri.

3.1 Ameren does not have any known conflicts within the project limits. Field adjustments of project improvements may be necessary at the discretion of the engineer. The contractor shall call for locates before performing any work within proximity of all Ameren facilities.

4.0 AT&T Distribution AT&T does not have any known conflicts within the project limits.

Contractor shall directly contact AT&T to verify location of facilities. The contractor shall coordinate construction activities with AT&T and take measures to ensure the integrity of the existing facilities are not disturbed. The contractor shall protect the integrity of any existing facility in close proximity to contract work while performing construction activities.

There will be no direct pay for compliance to any of the above provisions.

The Commission cannot warrant the information above which was provided by AT&T.

5.0 CenturyLink CenturyLink does not have any known conflicts within the project limits.

Contractor shall directly contact CenturyLink to verify location of facilities. The contractor shall coordinate construction activities with CenturyLink and take measures to ensure the integrity of the existing facilities are not disturbed. The contractor shall protect the integrity of any existing facility in close proximity to contract work while performing construction activities.

There will be no direct pay for compliance to any of the above provisions.

The Commission cannot warrant the information above which was provided by CenturyLink.

6.0 Charter Communications Charter does not have any known conflicts within the project limits.

Contractor shall directly contact Charter to verify location of facilities. The contractor shall coordinate construction activities with Charter and take measures to ensure the integrity of the existing facilities are not disturbed. The contractor shall protect the integrity of any existing facility in close proximity to contract work while performing construction activities.

There will be no direct pay for compliance to any of the above provisions.

The Commission cannot warrant the information above which was provided by Charter.

7.0 City of St. Louis Water St. Louis City Water does not have any known conflicts within the project limits.

Contractor shall directly contact City Water to verify location of facilities. The contractor shall coordinate construction activities with City Water and take measures to ensure the integrity of the existing facilities are not disturbed. The contractor shall protect the integrity of any existing facility in close proximity to contract work while performing construction activities.

Job No.: J6S3429 J6S3429B
Route: I-70 I-70
Counties: St. Louis City St. Louis City

There will be no direct pay for compliance to any of the above provisions.

The Commission cannot warrant the information above which was provided by City Water.

8.0 City of St. Louis Traffic St. Louis City Traffic does not have any known conflicts within the project limits.

Contractor shall directly contact City Traffic to verify location of facilities. The contractor shall coordinate construction activities with City Traffic and take measures to ensure the integrity of the existing facilities are not disturbed. The contractor shall protect the integrity of any existing facility in close proximity to contract work while performing construction activities.

There will be no direct pay for compliance to any of the above provisions.

The Commission cannot warrant the information above which was provided by City Traffic.

9.0 Metropolitan Sewer District While no relocations are planned, care should be used when working with and in the proximity of MSD facilities. Field adjustments of project improvements may be necessary at the discretion of the engineer. Any adjustments or variations from the proposed work shall be documented so as to be properly recorded in facility maps maintained by MSD.

Contractor shall directly contact MSD to verify location of facilities. The contractor shall coordinate construction activities with MSD and take measures to ensure the integrity of the existing facilities are not disturbed. The contractor shall protect the integrity of any existing facility in close proximity to contract work while performing construction activities.

There will be no direct pay for compliance to any of the above provisions.

The Commission cannot warrant the information above which was provided by MSD.

10.0 Spire Energy Spire does not have any known conflicts within the project limits. The contractor shall call for locates before performing any work within proximity of all Spire facilities.

Contractor shall directly contact Spire to verify location of facilities. The contractor shall coordinate construction activities with Spire and take measures to ensure the integrity of the existing facilities are not disturbed. The contractor shall protect the integrity of any existing facility in close proximity to contract work while performing construction activities.

There will be no direct pay for compliance to any of the above provisions.

The Commission cannot warrant the information above which was provided by Spire.

11.0 Verizon Verizon does not have any known conflicts within the project limits. The contractor shall call for locates before performing any work within proximity of all Verizon facilities.

Contractor shall directly contact Verizon to verify location of facilities. The contractor shall coordinate construction activities with Verizon and take measures to ensure the integrity of the existing facilities are not disturbed. The contractor shall protect the integrity of any existing facility in close proximity to contract work while performing construction activities.

There will be no direct pay for compliance to any of the above provisions.

The Commission cannot warrant the information above which was provided by Verizon.

J. Environmental Requirements for Epoxy Polymer Resurfacing

1.0 Description. In general, because of the process for epoxy polymer application, that being the use of an epoxy spray for adhesion or fluid epoxy polymer mix, care must be taken to avoid overspray or runoff that will enter storm drain systems or bodies of water. For use on bridges, all drains must be adequately blocked until the mixture is set up permanently. This includes the cleanup process for loose material/aggregate. No spray, runoff, or materials shall be allowed to enter any drain, stream, or wetland.

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, unless specified elsewhere in the contract document.

K. Slope Protection Joint Sealing

1.0 Description. This work shall consist of preparing and sealing joints in the existing concrete slope protection under the bridges at the locations shown in the plans or as directed by the engineer.

2.0 Material. Joints shall be sealed with hot pour or roof tar (Trowel Grade). All material shall be in accordance with Division 1000, Material Details, and specifically as follows:

Item	Section
Material for Joints	1057
Concrete and Asphalt Joint Sealer, Hot-Poured Elastic Type	1057.5

3.0 Construction Requirements. All joints in the slope protection shall be sealed, including at abutment faces and along the outside of the wing walls. All work to seal joints in the existing concrete slope protection shall be performed in accordance with Section 413.60.

4.0 Basis of Payment. The accepted quantity of slope protection joint sealing will be paid at the contract unit price for the pay item included in the contract. All labor, equipment and material cost required to fulfill this requirement shall be included in the unit price for the following pay item:

Job No.: J6S3429 J6S3429B
Route: I-70 I-70
Counties: St. Louis City St. Louis City

Item No.	Type	Description
413-99.03	LF	Slope Protection Joint Sealing

L. Use of High Density Polyurethane

1.0 Description. This work shall consist of either filling in voids under Bridge Approach slabs, sidewalk slabs and concrete slope protection slabs **or** raising these slabs to eliminate the vertical displacement. The contractor will have the option to fill in voids using either the high density polyurethane or by using a cementitious grout or flowable fill material.

2.0 Material. All material for the cementitious grout shall be in accordance with Division 1000, Material Details, and specifically as follows:

Item	Section
Fly Ash	1018
Cement, Type I, II or III	1019
Water	1070

3.0 Construction Requirements. All work to level displaced concrete slabs shall be performed in accordance with Specification Section 625.20.

4.0 Basis of Payment. The accepted quantity of filling voids or raising slabs will be paid at the contract unit price for the pay item included in the contract. All labor, equipment and material cost required to fulfill this requirement shall be included in the unit price for the following pay items:

Item No.	Type	Description
625-20.01	LBS	Undersealing Material High Density Polyurethane
625-20.03	LBS	Slab Jacking Material High Density Polyurethane

M. Full Depth Pavement Repair on Concrete Approach Pavement

1.0 Description. This work shall consist of performing full depth pavement repair on reinforced concrete approach pavement as shown in the plans or as directed by the engineer and in accordance with Sections 613 and 704 of the Standard Specifications.

2.0 Construction Requirements. Removal of concrete in the repair area as designated by the engineer shall be in accordance with Section 704.4 of the Standard Specifications.

3.0 Method of Measurement. Measurement for full depth pavement repair on concrete approach pavement will be made per square yard.

4.0 Basis of Payment. The accepted quantity for the full depth pavement repair on concrete approach pavement will be paid at the contract unit price for each of the pay items included in the contract. All labor, equipment and material cost including removals, saw cuts, installation of new base, concrete, and steel reinforcement, repairing steel reinforcement etc. required to fulfill this requirement shall be included in the unit price for the following pay item:

Job No.: J6S3429 J6S3429B
Route: I-70 I-70
Counties: St. Louis City St. Louis City

Item No.	Type	Description
613-99.05	SY	Full Depth Pavement Repair on Concrete Approach Pavement

N. ADA Compliance and Final Acceptance of Constructed Facilities JSP-10-01B

1.0 Description. The contractor shall comply with all laws pertaining to the Americans with Disabilities Act (ADA) during construction of pedestrian facilities on public rights of way for this project. An ADA Checklist is provided herein to be utilized by the contractor for verifying compliance with the ADA law. The contractor is expected to familiarize himself with the plans involving pedestrian facilities and the ADA Post Construction Checklist prior to performing the work.

2.0 ADA Checklist. The contractor can locate the ADA Checklist form on the Missouri Department of Transportation website:

www.modot.org/business/contractor_resources/forms.htm

2.1 The ADA Checklist is intended to be a helpful tool for the contractor to use during the construction of the pedestrian facilities and a basis for the commission's acceptance of work. Prior to work being performed, the contractor shall bring to the engineer's attention any planned work that is in conflict with the design or with the requirement shown in the checklist. Situations may arise where the checklist may not fully address all requirements needed to construct a facility to the full requirements of current ADA law. In those situations, the contractor shall propose a solution to the engineer that is compliant with current ADA law using the following hierarchy of resources: 2010 ADA Standards for Accessible Design, Draft Public Rights of Way Accessibility Guidelines (PROWAG) dated November 23, 2005, MoDOT's Engineering Policy Guidelines (EPG), or a solution approved by the U.S. Access Board.

2.2 It is encouraged that the contractor monitor the completed sections of the newly constructed pedestrian facilities in attempts to minimize negative impacts that his equipment, subcontractors or general public may have on the work. Completed facilities must comply with the requirements of ADA and the ADA Checklist or have documented reasons for the non-compliant items to remain.

3.0 Coordination of Construction.

3.1 Prior to construction and/or closure on an existing pedestrian path of travel, the contractor shall submit a schedule of work to be constructed, which includes location of work performed, the duration of time the contractor expects to impact the facility and an accessible signed pedestrian detour compliant with MUTCD Section 6D that will be used during each stage of construction. This plan shall be submitted to the engineer for review and approval at or prior to the pre-construction conference. Accessible signed detours shall be in place prior to any work being performed that has the effect of closing an existing pedestrian travel way.

3.2 When consultant survey is included in the contract, the contractor shall use their survey crews to verify that the intended design can be constructed to the full requirements as established in the 2010 ADA Standards. When 2010 ADA Standards do not give sufficient information to construct the contract work, the contractor shall refer to the PROWAG.

3.3 When consultant survey is not included in the contract, the contractor shall coordinate with the engineer, prior to construction, to determine if additional survey will be required to confirm the designs constructability.

4.0 Final Acceptance of Work. The contractor shall provide the completed ADA Checklist to the engineer at the semi-final inspection. ADA improvements require final inspection and compliance with the ADA requirements and the ADA Checklist. Each item listed in the checklist must receive either a "YES" or an "N/A" score. Any item receiving a "NO" will be deemed non-compliant and shall be corrected at the contractor's expense unless deemed otherwise by the engineer. Documentation must be provided about the location of any non-compliant items that are allowed to remain at the end of the construction project. Specific details of the non-compliant items, the ADA requirement that the work was not able to comply with, and the specific reasons that justify the exception are to be included with the completed ADA Checklist provided to the engineer.

4.1 Slope and grade measurements shall be made using a properly calibrated, 2 foot long, electronic digital level approved by the engineer.

5.0 Basis of Payment. The contractor will receive full pay of the contract unit cost for all sidewalk, ramp, curb ramp, median, island, approach work, cross walk striping, APS buttons, pedestrian heads, detectible warning systems and temporary traffic control measures that are completed during the current estimate period as approved by the engineer. Based upon completion of the ADA Checklist, the contractor shall complete any necessary adjustments to items deemed non-compliant as directed by the engineer.

5.1 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 documents.

O. ADA Curb Ramps

1.0 Description. This work shall consist of constructing new concrete curb ramps and island cut-throughs that are compliant with current Americans with Disabilities Act (ADA) and MoDOT guidelines at locations shown on the plans and as directed by the engineer. Providing work zone protections for pedestrians will be a primary component of this project. Specifically, this work shall consist of providing pedestrian detours, including all necessary designing of specific detour routes, placing of signing, barricades, and channelizing. Nothing in this provision shall be construed to limit contractor innovation in mitigating pedestrian traffic impacts. All revisions shall be submitted to the engineer in writing 3 days prior to approval

1.1 The contractor shall assure that the persons establishing the grades of the ADA facilities have a copy of ADA related provisions at hand for reference including the construction ADA checklist, ADA related JSPs, plans, and standard plans. If it is found that written provisions for ADA facilities are not at hand, the engineer may cause ADA work to be ceased until a copy arrives.

2.0 Construction Requirements. Except as noted herein, all applicable provisions in Sec 608 for construction of curb ramps shall apply. Items and materials used for pedestrian traffic control shall be in accordance with Section 616 of the Missouri Standard Specifications for Highway Construction of the version current at the time of the bid opening, as applicable.

2.1 The area to be removed and/or constructed under this provision includes the entire curb ramp, flares, landing pads, truncated domes, sidewalk, and any curbs, including variable height curbs.

2.1.1 Asphalt mill and fill may be necessary at the face of the ADA ramp to provide a smooth transition from the roadway to the ramp or to drain storm water away from the ADA ramp. The contractor shall establish the grade of the flow line of the gutter before establishing the grades of ADA facilities. Running or standing storm water shall not be pushed out into the roadway by the asphalt where it may be splashed on pedestrians by passing vehicles or cause a hydroplaning hazard. The asphalt mill and fill shall be a minimum of 1.75 inches thick and the edges shall be at a smooth milled butt joint. The contractor shall use an approved BP-1 mix for all corner asphalt mill and fill work unless otherwise specified elsewhere in the contract. Asphalt mill and fill is included in the work of ADA Curb Ramps. If asphalt mill and fill is needed at a corner without any other ADA work, it will be found as a separate line item in this contract.

2.2 Recommendations for the design type of each curb ramp to be built on this project are shown on the plans. These curb ramps may vary from the original design in size, shape, and location as necessary to comply with ADA laws. It is the contractor's responsibility to inspect locations in the field before bidding to verify quantities needed to satisfy this provision.

2.2.1 ADA provides some exceptions to ramp slope where space limitations exist. The apparent construction limits shown on the plans are not considered a space limitation. The use of these exceptions will not be considered by the engineer unless the length needed for compliance goes beyond 10 additional feet as shown as the plans are interpreted by the engineer. The contractor shall not place any ADA exceptions without consulting the engineer on a case by case basis.

2.3 Work Area Safety. The contractor shall maintain a work area that is safe for pedestrians. The areas adjacent to the contractor's physical work site shall also be maintained as needed to provide access to adjoining properties, regardless of whether a detour route is in place. All holes shall be covered with secured plywood or steel plates, and the work area walkways shall be free of trip hazards, loose debris, vehicles, materials, and equipment when the contractor is not in the work area. A 3 foot minimum path shall be maintained on any used-in-place walkway needed for access. The contractor shall not be permitted to park on any walkway solely to avoid the need for a lane closure. Items for lane closures are provided in the plans and quantities. The contractor shall fence in his work area to provide no access to the general public during the construction of the project.

2.4 Prosecution of Work. The contractor shall have all necessary personnel, equipment, and materials at hand for all work at each location before the work begins so that work may proceed without delay. Curb ramp work on each street corner shall be completed 84 hours after work begins on that corner, including adjusting pull boxes, placing sod, placing curb, or any other incidental work. The contractor shall be allowed to work at no more than two corners of an intersection at any time, regardless of the amount of work at each intersection.

2.4.1 Pedestrian Detours. The contractor may exempt themselves from the above 84 hour provision by providing and maintaining a signed pedestrian detour at their own cost on a route with equal or better ADA accessibility than the closed pathway if such routes exist. Pedestrian detours shall be approved by the engineer. Since MoDOT may not own the right-of-way of the detour path, the contractor shall ascertain that the detour route will remain open during its

planned use as a detour. The contractor shall inform the engineer of their plans to use a detour not less than three weeks before it is set up.

2.4.2 Detour Locations. Pedestrian detours are to cross the street or go around the block where facilities exist. It may be possible to provide one detour for more than one corner/work location; the quantity for pedestrian detours will be based on the number of work locations needing detours and not on the number of detours actually used. The detour routes shall have equal or better accessibility than existing in the construction location and shall be approved by the engineer. Detours may also use roadway shoulders with sufficient width to provide for pedestrians, and the traffic control to protect them, and where parking is not allowed, provided drainage structures are not a hazard.

At locations where an pedestrian detour is not feasible, the contractor has the option of staging work to maintain a 3' minimum pathway, providing a temporary pathway (3' minimum width) that does not reduce the number of through lanes of the roadway, or providing a full closure with signs for a maximum of 84 hours to reopen the walkway to pedestrian traffic in its final configuration. Locations for full closure shall be submitted to the engineer in writing 2 weeks prior to beginning work, and signs shall be placed announcing the closure 1 week before work begins.

2.5 Liquidated Damages. If work associated with curb ramp modification begins, but is not complete and open to pedestrian traffic within **84 hours** of commencement, 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, and pedestrian 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 **\$250.00 per hour** of delay that closes a walkway in excess of 84 hours. The contractor's superintendent and the engineer shall be on site at the time of any closures and shall both record an agreed time when the walkway was closed. It shall be the responsibility of the engineer to determine the quantity of excess closure time.

2.5.1 The said liquidated damages specified will be assessed regardless of whether it would otherwise be charged as liquidated damages under the Missouri Standard Specification for Highway Construction. There shall be no permitted excuse for delay of the work, including weather.

2.6 The curb ramps to be modified per this provision vary in size. It is the contractor's responsibility to verify actual quantities needed to satisfy this provision.

2.7 The truncated domes shall come from Pre-Qualified List FS-1067 Table 1.

2.8 Modified ADA Curb Ramp. These ramps shall meet the same requirements as standard ADA Curb Ramps, except the pavement thickness shall be eight inches.

3.0 Method of Measurement. Final measurement will not be made except for authorized changes during construction or where appreciable errors are found in the contract quantity. The revision or correction will be computed and added to or deducted from the contract quantity.

4.0 Basis of Payment. The accepted quantity of ADA compliant curb ramps will be paid at the contract unit price for:

Item No.	Type	Description
608-99.02	Each	ADA Curb Ramp
608-99.02	Each	Modified ADA Curb Ramp 8 in

No direct payment will be made for any excavating or preparing of the subgrade, furnishing or installing reinforcement, any incidental work required for furnishing and installing tie bars, tinting of concrete surface as required in the plans, truncated domes, sod or seeding, or asphalt mill and fill required to transition the new ramp to existing pavement or to drain the sidewalk, warping sidewalk to meet existing sidewalk sections, relocating or resetting granite curb, relocating existing pedestrian push buttons on signal poles, the removal and replacement of existing curb/curb and gutter, the removal of existing concrete slabs, saw cuts, or other work necessary in the satisfactory completion of this provision.

P. Concrete Curb Under Guardrail

1.0 Description. This work shall consist of removing and replacing or modifying existing curb to comply with guardrail standards for a variety of concrete curb types and heights at locations shown on the plans within guardrail limits.

2.0 Construction Requirements. The contractor shall have the option of either removing and replacing existing curbs or modifying existing curbs by horizontal saw cut methods to meet the required curb height dimensions as designated in the plans. If the contractor elects to remove and replace the existing curbs, the contractor has the option to choose the most practical curb type at each location unless specified in the plans. The method of obtaining curb height compliance under guardrail shall be at the discretion of the contractor considering traffic control and safety requirements. The contractor shall inform the engineer of the types of curbs that will be used and in what locations before work begins. The contractor shall resolve any concerns expressed by the Engineer. Construction and materials shall be in accordance with Sec 609, except as modified herein. Any special materials that may be used shall be tested and approved by MoDOT Materials prior to commencing this work.

2.1 Joints shall be constructed at intervals and locations shown on the plans or as directed by the engineer.

2.2 Reinforcing steel epoxy coating shall be repaired in accordance to Section 710.3.3.

3.0 Basis of Acceptance. Acceptance of this provision will be based on visual inspection by the engineer.

4.0 Method of Measurement. Final measurement will be field verified and measured to the nearest linear foot along the curb face.

5.0 Basis of Payment. Payment for furnishing all labor, equipment, materials, seeding, mulching, grading, sawcut, erosion control, removal and traffic control including other incidentals necessary to remove and replace or modify existing curbs shall be completely covered by the contract unit price for the following pay item:

Job No.: J6S3429 J6S3429B
Route: I-70 I-70
Counties: St. Louis City St. Louis City

Item Number	Type	Description
609-99.03	L.F.	Concrete Curb Under Guardrail

Q. Optional Temporary Pavement Marking Paint NJSP-18-07B

1.0 Description. This provision provides the contractor with the option to either complete all Permanent Pavement Marking Paint (PPMP) prior to the time limits specified herein or to apply Temporary Pavement Marking Paint (TPMP) in accordance with Sec 620.10.2 (4 in. width) in all locations shown on the plans as PPMP and delay application of the PPMP until the spring of 2023, as allowed herein. PPMP is defined as Standard Waterborne Paint and High Build Waterborne Paint and does not include Sec 620.20.3 Durable Pavement Markings.

1.1 No application of PPMP shall occur between October 1, 2022 and March 1, 2023, both dates inclusive, except as stated herein. When the contractor has begun application of PPMP prior to October 1, 2022, and weather limitations stated in Sec 620.20.2.4 can be met, the contractor may complete the PPMP within the first seven (7) calendar days of October. If all (100%) of the PPMP is not completed on or before October 7, 2022, all previously applied PPMP, including any painted markings applied prior to October 1, shall be considered TPMP, and the contractor shall complete the remaining marking with TPMP, and then re-apply PPMP in all planned locations after March 1, 2023. All PPMP shall be completed prior to June 1, 2023. No additional payment will be made for PPMP that is later determined to be TPMP due to the contractor's failure to complete the PPMP within the time specified.

1.2 Use of TPMP Prior to October 1. The contractor has the option to apply TPMP in lieu of PPMP prior to October 1, 2022, even when there is sufficient time to complete the PPMP prior to October 1, 2022. For example, the contractor may choose to use TPMP as a base coat for the PPMP on open-graded surfaces in order to achieve higher retroreflectivity readings on the surface coat as compared to a single application.

1.2.1 The contractor has the option of using TPMP in lieu of Temporary Raised Pavement Markers if applied each day that existing markings are obliterated.

2.0 Construction Requirements. TPMP shall be accurately placed in the final planned location and shall be completely covered by the final application of PPMP. Any failure to comply with this requirement shall be corrected by removal of the misplaced pavement markings at the contractor's expense and without marring of the pavement surface.

2.1 Prior to application of the PPMP on TPMP, TPMP shall be fully cured in accordance with the manufacturer's recommendation, or for a period of 12 hours, whichever is greater.

3.0 Weather Limitations. All weather limitations specified in Sec 620 for PPMP and TPMP shall apply. Cold Weather Pavement Marking Paint, in accordance with Sec 620.10.6, shall be used for TPMP when specified weather limitations do not allow the use of waterborne paint. No additional payment will be made for the use of Cold Weather Pavement Marking Paint as TPMP. Cold Weather Pavement Marking Paint is not an allowable substitute for PPMP and shall subsequently be covered with PPMP.

4.0 Time Exception. If application of PPMP is to be delayed to the spring of 2023, the contractor shall submit a request to the engineer for a time exception and shall provide a revised work schedule that shows the planned completion of the PPMP.

4.1 Upon receipt of the time exception request in Section 4.0, the engineer will list “Application of Permanent Pavement Marking Paint” as an exception on the Semi-Final Inspection form, thus granting an exception to the count of contract time thru June 1, 2023, solely for the purpose of delaying application of PPMP. This time exception shall not apply to any time needed to complete any other work items. Liquidated Damages, as specified elsewhere in this contract, shall remain in effect for all other work items not completed by the contract time limits, as specified elsewhere in this contract, and for PPMP not completed by June 1, 2023.

5.0 Method of Measurement. No final measurement will be made for TPMP.

6.0 Basis of Payment. Full payment for TPMP will be made at the contract lump sum price even when PPMP is completed prior to the time limitation and TPMP is not used or only partially used.

6.2 If a \$0 bid is entered for TPMP, no payment will be made should TPMP become necessary.

Item Number	Type	Description
620-99.01	LS	Temporary Pavement Marking Paint

R. Metro Bus Service

1.0 Description. The contractor shall be aware that several of the overpass bridges are along routes that are part of the Metro Bus service network. It shall be the contractor’s responsibility to determine whether any existing bus stop locations will be impacted due to the lane closures or other traffic control necessary for the staging of the proposed work. Metro shall be contacted 4 weeks prior to any traffic control being installed that may affect bus service. At least one pedestrian access point to each bus stop must be available at all times, unless approved by Metro.

1.1 All active bus stop signs shall remain visible at all times during construction. Should any of the existing bus stop signs or posts be damaged by the contractor’s negligence, they shall be replaced at the contractor’s expense.

1.2 The contractor shall contact Metro regarding the requirements of this section. Below is the contact information.

Natalie Siebert

Senior Planner | Transit Operations | Planning & System Development Division

BI-STATE DEVELOPMENT | METRO Transit

211 North Broadway Suite 700, Saint Louis, MO 63102-2759

T 314.982.1400 (1816) | M 314.497.4916 | F 314.923.3034

nmsiebert@metrostlouis.org

www.metrostlouis.org – WEB | www.nextstop.org – BLOG

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, unless specified elsewhere in the contract documents.

S. Temporary Traffic Control

1.0 Description. All work necessary to maintain safe and efficient traffic flow through the work areas shall be provided by the contractor. This will include furnishing, relocating, and removing temporary traffic control devices, truck mounted attenuators and equipment, and the removal and relocation or covering and uncovering of existing signs and other traffic control devices in accordance with the contract documents or as directed by the engineer.

2.0 Work requirements. Work shall be in accordance with Sec 616, Sec 612, and the contract plans.

3.0 Method of Measurement. The quantities shown on the plans shall be considered an estimate and may be subject to change based on field conditions. This work will not be measured for payment, but will be considered a lump sum unit. Any Value Engineering proposals to the temporary traffic control will not be paid for through value engineering but will be covered under Temporary Traffic Control, lump sum.

4.0 Basis of Payment.

4.1 Partial payments will be made as follows:

(a) The first partial payment will be made when five percent of the original contract amount is earned. This payment will be the lesser of 50 percent of the contract price for the item of temporary traffic control or 5 percent of the original contract price.

(b) The second partial payment will be made when 50 percent of the original contract amount is earned. This payment will be the lesser of 25 percent of the original contract price for the item of temporary traffic control or 2.5 percent of the original contract price.

(c) The third partial payment will be made when 75 percent of the original contract amount is earned. This payment will be the lesser of 20 percent of the original contract price for the item of temporary traffic control or 2 percent of the original contract price.

(d) When the engineer has accepted the contract for maintenance in accordance with Sec 105, the remaining contract price for the item of temporary traffic control will be paid.

(e) The above partial payment schedule may be adjusted by the engineer if proof of invoices submitted by the contractor demonstrate additional temporary traffic control costs were incurred earlier than the above proposed schedule. The total payment for temporary traffic control will not exceed the bid amount for Temporary Traffic Control, lump sum, unless covered by a cost change order as referenced in the following Section 4.3.

4.1.1 For the purposes of this provision, the term "original contract price" will be construed as the total dollar value of the construction items (excluding temporary traffic control) of the original contract.

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

Item Number	Type	Description
616-99.01	Lump Sum	Misc. Temporary Traffic Control

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) Providing channelizers.
- (f) Worker apparel.
- (g) Flaggers, pilot vehicles, and appurtenances at flagging stations.
- (h) Furnishing, installing, operating, maintaining, and removing construction-related vehicle and equipment lighting.
- (i) Construction and removal of temporary equipment crossovers, including restoring pre-existing crossovers.
- (j) Removing existing pavement markings, installing temporary pavement markings, and removing and relocating temporary pavement markings as necessary for staging operations.
- (k) Installing "Drive Smart" and "Point of Presence" signs.

4.3 Any additional work deemed necessary by the engineer that requires temporary traffic control and is not covered by the contract plans will be included in the cost change order for the additional work. However, if the added work is required in a stage where temporary traffic control is already in place, no additional traffic control pay will be allowed in this case.

T. NTCIP Compliant Changeable Message Sign Requirements

1.0 Description. All solar powered changeable message signs, hereinafter referred to as a CMS, shall be in accordance with these specifications.

2.0 Material. Each CMS shall consist of an all LED (light emitting diode) matrix message board, solar/battery power supply and a user-operated interface, as specified, all mounted on a heavy duty, towable trailer.

2.1 Each CMS shall be either Full Matrix or Character Matrix, and have the following minimum characteristics:

- (a) Full Matrix - Each CMS shall be the Full Matrix type with the capability of providing one, two, and three lines of individual changeable characters with minimum heights of 52 (1300), 28 (700), and 18 (450) inches (mm), respectively. Full Matrix signs shall be capable of both static and dynamic graphics, and full display sized messages.
- (b) Character Matrix (Three Line) – Each CMS shall consist of a minimum of three lines containing eight individual changeable characters per line. Each character shall be a minimum of 12 inches wide and 18 inches (450 mm) high.
- (c) Sign firmware shall comply with the current FHWA and DOT (Department of Transportation) NTCIP standards and support all NTCIP mandatory objects.
- (d) The sign controller shall be remotely accessible by the MoDOT St Louis District Transportation Management Center (TMC) through the Commission's ATMS (Advanced Traffic Management System) software, currently TransSuite provided by TransCore. The contractor will be responsible for ensuring the CMS is added to the ATMS software.
- (e) The CMS shall have a cellular data modem compatible with the district's current cellular IP (packet data) service provider and be capable of allowing the MoDOT St Louis District TMC ATMS software to have full control of the NTCIP compliant CMS controller remotely. Modem shall be capable of being programmed with a static IP.
- (f) The sign shall have a GPS unit that can assist in locating the sign's position when polled by the TMC. The GPS unit must be remotely accessible by the TMC and be part of or work with the provided communication modem.
- (g) Physical access to the onboard computer shall be protected by a padlock or other locking handle mechanism. Electronic access to the onboard computer shall be protected by a username and password.

2.2 Full matrix CMS and character matrix CMS shall meet the following:

- (a) The overall sign dimensions shall not be less than 72 inches (1800 mm) high x 126 inches (3150 mm) wide.
- (b) The CMS shall be legible up to a distance of 650 feet (200 m) for both day and night operations and shall be visible for ½-mile (800 m) with 18 inch (450 mm) characters.
- (c) When fully raised in the display position, the bottom of the CMS board shall be at least a height of 7 feet (2100 mm) from the ground and shall be able to rotate a complete 360 degrees atop the lift mechanism. A sight tube, used to aim the CMS board to oncoming traffic, shall be installed on the CMS board or mast. The CMS shall have an electrical-hydraulic lifting mechanism that includes a manual lifting and lowering relief mechanism as a backup. It also must be able to be locked into various viewing angles as determined best for the motorists by the CMS operator.
- (d) All LED displays and control circuitry shall be operational from -20 F (6 C) to 120 F (50 C). The LED's shall have a rated life of 100,000 hours. The LED's shall be ITE amber in color on a flat black background.

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- (e) The CMS face shall be constructed that if an individual panel or pixel fails the rest of the face shall continue to display the message.
- (f) All costs and coordination needed for testing to verify modem communication, sign NTCIP compliance, remote GPS status polling, ability to control the sign via the St Louis District's ATMS software provided by TransCore shall be the sole responsibility of the Contractor. Full integration into TransCore's ATMS shall be completed at least 5 business days prior to use of the CMS in the project. TransCore contact information will be provided to the contractor by contacting MoDOT's Gateway Guide staff at 314-275-1526 or via email at ggtech@modot.mo.gov with details of the request. No other support shall be provided by MoDOT other than TransCore contact information. Information provided shall include, at a minimum, CMS make and model, IP address, and proposed locations and messages.
- (g) The Contractor shall be responsible for all monthly cellular service fees for the duration of the project.
- (h) The unit shall be able to withstand a 65-mph (105-kmph) maximum road wind speed. The trailer shall be able to support the fully extended CMS board in an 80-mph (130-kmph) wind load.
- (i) Solar charging system shall allow for total autonomy of 24/7/365 continuous operation.
- (j) All exterior surfaces except the sign face shall be cleaned, primed, and finished with two coats of Highway Safety Orange and the sign interior itself shall be cleaned and finished with one coat of corrosion inhibiting primer and two coats of flat black. The sign face shall be covered with a rigid translucent material to prevent damage to the sign face caused by the environment.

3.0 Construction Requirements. Prior to placing a CMS on a project, the engineer shall verify proposed CMS location is void of conflict with another DMS or CMS locations presently established. If a conflict is present, the engineer shall contact the Traffic Management Center (TMC) at 314-275-1526 to mitigate. If no conflict is present, engineer shall provide Traffic Management Center (TMC) with the Job Number, Route, County, specific CMS location, and a CMS identification number that is permanently affixed to the CMS. The engineer and contractor shall verify the message displayed on board is compliant with CMS messaging policies. The contractor shall place the CMS 6 feet [2 meters] off of the right edge of shoulder at the location shown on the plans or as directed by the engineer. The CMS shall be placed so that the right side of the unit is advanced approximately 3 degrees ahead with the direction of traffic. CMS shall not be located in medians. CMS shall be delineated with a minimum of five non-metallic channelizing devices. Installation, including location and placement, shall be approved by the engineer. If needed, the contractor shall relocate the CMS as directed by the engineer.

3.1 When not in use, the CMS shall be stored no closer than 30 feet [10 meters] to the edge of pavement carrying traffic, unless it is in a properly protected area or an off-site storage area or as otherwise directed by the engineer.

4.0 Basis of Payment. All expenses incurred by the contractor in integrating, maintaining, relocating, operating, and protecting the changeable message signs as outlined above shall be paid for at the contract unit price for the following:

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Item No.	Type	Description
616-99.02	Each	NTCIP Compliant Changeable Message Sign (Contractor Furnished and Retained)

4.1 Cost for channelizers shall be included in the contract unit price for CMS.

Cost for cellular phone hookup and monthly usage fee for the duration of the project shall be included in the contract unit price for CMS.

U. ADA Compliance and Final Acceptance of Constructed Facilities JSP-10-01B

1.0 Description. The contractor shall comply with all laws pertaining to the Americans with Disabilities Act (ADA) during construction of pedestrian facilities on public rights of way for this project. An ADA Checklist is provided herein to be utilized by the contractor for verifying compliance with the ADA law. The contractor is expected to familiarize himself with the plans involving pedestrian facilities and the ADA Post Construction Checklist prior to performing the work.

2.0 ADA Checklist. The contractor can locate the ADA Checklist form on the Missouri Department of Transportation website:

www.modot.org/business/contractor_resources/forms.htm

2.1 The ADA Checklist is intended to be a helpful tool for the contractor to use during the construction of the pedestrian facilities and a basis for the commission's acceptance of work. Prior to work being performed, the contractor shall bring to the engineer's attention any planned work that is in conflict with the design or with the requirement shown in the checklist. Situations may arise where the checklist may not fully address all requirements needed to construct a facility to the full requirements of current ADA law. In those situations, the contractor shall propose a solution to the engineer that is compliant with current ADA law using the following hierarchy of resources: 2010 ADA Standards for Accessible Design, Draft Public Rights of Way Accessibility Guidelines (PROWAG) dated November 23, 2005, MoDOT's Engineering Policy Guidelines (EPG), or a solution approved by the U.S. Access Board.

2.2 It is encouraged that the contractor monitor the completed sections of the newly constructed pedestrian facilities in attempts to minimize negative impacts that his equipment, subcontractors or general public may have on the work. Completed facilities must comply with the requirements of ADA and the ADA Checklist or have documented reasons for the non-compliant items to remain.

3.0 Coordination of Construction.

3.1 Prior to construction and/or closure on an existing pedestrian path of travel, the contractor shall submit a schedule of work to be constructed, which includes location of work performed, the duration of time the contractor expects to impact the facility and an accessible signed pedestrian detour compliant with MUTCD Section 6D that will be used during each stage of construction. This plan shall be submitted to the engineer for review and approval at or prior to the pre-construction conference. Accessible signed detours shall be in place prior to any work being performed that has the effect of closing an existing pedestrian travel way.

3.2 When consultant survey is included in the contract, the contractor shall use their survey crews to verify that the intended design can be constructed to the full requirements as established in the 2010 ADA Standards. When 2010 ADA Standards do not give sufficient information to construct the contract work, the contractor shall refer to the PROWAG.

3.3 When consultant survey is not included in the contract, the contractor shall coordinate with the engineer, prior to construction, to determine if additional survey will be required to confirm the designs constructability.

4.0 Final Acceptance of Work. The contractor shall provide the completed ADA Checklist to the engineer at the semi-final inspection. ADA improvements require final inspection and compliance with the ADA requirements and the ADA Checklist. Each item listed in the checklist must receive either a "YES" or an "N/A" score. Any item receiving a "NO" will be deemed non-compliant and shall be corrected at the contractor's expense unless deemed otherwise by the engineer. Documentation must be provided about the location of any non-compliant items that are allowed to remain at the end of the construction project. Specific details of the non-compliant items, the ADA requirement that the work was not able to comply with, and the specific reasons that justify the exception are to be included with the completed ADA Checklist provided to the engineer.

4.1 Slope and grade measurements shall be made using a properly calibrated, 2 foot long, electronic digital level approved by the engineer.

5.0 Basis of Payment. The contractor will receive full pay of the contract unit cost for all sidewalk, ramp, curb ramp, median, island, approach work, cross walk striping, APS buttons, pedestrian heads, detectible warning systems and temporary traffic control measures that are completed during the current estimate period as approved by the engineer. Based upon completion of the ADA Checklist, the contractor shall complete any necessary adjustments to items deemed non-compliant as directed by the engineer.

5.1 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 documents.

V. 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.

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- (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.

W. 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.

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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.

X. Special Provisions for Protection of Terminal Railroad Association of St. Louis Railway Interests

To Report an Emergency on property of the Terminal Railroad Association of St. Louis (hereinafter "Railroad"), call: (618) 451-8478. This project includes an Epoxy Polymer overlay of the Adelaide Avenue bridge deck over the TRRA Merchant Subdivision, West Belt Industrial Lead; MoDOT Project J6S3429B.

1.0 Authority of Railroad Engineer and Commission's Representative.

1.1 Railroad's authorized representative, herein called "Railroad Engineer", shall have final authority in all matters affecting the safe maintenance and operation of railroad traffic including the adequacy of the foundations and structures supporting Railroad tracks. The Railroad Engineer for this Project is identified below, with current contact information:

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Mr. Eric Fields
Chief Engineer
Terminal Railroad Association of St. Louis
1017 Olive Street, 5th Floor
St. Louis, Missouri 63101
Office: (618) 451-8428

1.2 The Commission's authorized representative, herein called "Engineer", shall have authority over all other matters as prescribed herein and in the Project specifications.

2.0 Contractor's Indemnity Obligations to Railroad.

2.1 The term "Contractor" as used in these special provisions (the "Railroad Job Special Provisions") means the Commission's contractor for the construction of the proposed work on the grade separation structure (the "Project"), and includes any and all subcontractors. The Contractor shall indemnify, defend and hold Railroad harmless from and against any and all loss, damage, claims, demands, causes of action, costs and expenses of any nature arising out of injury to or death of any person, or out of damage to or destruction of any property, including, without limitation, damage to fiber optic, communication and other cable lines and systems, where this injury, death, damage or destruction results from any cause arising out of work performed by the Contractor pursuant to the agreement between Railroad and Commission for this Project, and shall also release Railroad from, and shall waive any claims for, injury or damage to equipment or other property, which may result from the construction, maintenance and operation of railroad tracks, wire lines, fiber optic cable, pipe lines and other facilities on Railroad's right of way by the Contractor. The Contractor's liability will not be affected if any damage or claim was occasioned by or contributed to by the negligence of Railroad, Railroad's agents, servants, employees or otherwise, except to the extent that any damage or claim has been proximately caused by the intentional misconduct or sole or gross negligence of Railroad, or any of Railroad's officers, employees, agents, subcontractors, successors or assigns. The Contractor's indemnity shall include loss of profits or revenue arising from damage or destruction to fiber optic, communication and other cable lines and systems.

2.2 In addition to the indemnity obligations contained in the preceding paragraph, the Contractor shall indemnify, defend and hold Railroad harmless from any claims, expenses, costs, actions, demands, losses, fines, penalties, and fees, arising from, related to or connected, in whole or in part, with the removal of the Contractor's agents, servants, employees or invitees from Railroad's property for safety reasons.

2.3 The Contractor shall also indemnify, defend and hold Railroad harmless with reference to all fines or penalties imposed or assessed by federal, state and local governmental agencies against Railroad as the proximate result of contractor's work under this contract, including these Railroad Job Special Provisions.

3.0 Notice of Starting Work. The Contractor shall not commence any work on Railroad's right of way until the Contractor has complied with the following conditions:

3.1 At least thirty (30) days before beginning any work upon Railroad's right of way, the Contractor shall furnish to Railroad and Commission a schedule for all work required to complete the portion of the Project within Railroad's right of way, and shall arrange for a job site meeting between the Contractor, the Engineer, and Railroad Engineer. Railroad may withhold

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providing any flaggers until the Contractor has conducted the job site meeting and scheduled the Contractor's work.

3.2 At least 30 days before the Contractor proposes to begin work on Railroad's right of way, the Contractor shall give Railroad written notice of intent to begin work on Railroad's right of way, to Railroad Engineer.

3.3 The Contractor shall obtain written or electronic authorization from Railroad to begin work on Railroad's right of way, including an outline of specific conditions with which contractor shall comply. Railroad shall not unreasonably withhold this authorization. The contractor shall obtain from the Railroad and complete the Terminal Railroad Association of St. Louis License for Right of Entry On or Near Operational Railroad Property.

3.4 The Contractor shall obtain the insurance coverage required in Section 14.0 of these Railroad Job Special Provisions. Contractor shall submit written evidence of such coverage to Railroad prior to commencing any work.

3.5 Safety Orientation: The Contractor shall ensure that all of its employees, subcontractors or invitees enroll with e-railsafe Shortline at www.ers-shortline.com and that any and all such employees, subcontractors or invitees obtain and have on their person at all times while on Railroad Property, the appropriate credentials. The Contractor shall certify that each of contractor's employees, subcontractors or invitees who will be working Railroad's right of way have received the same safety orientation through sessions conducted by the contractor or through the Internet before any work shall be done on the Railroad's right of way.

3.6 Railroad's written authorization to proceed with the work, with a copy to the Engineer, will include the names, addresses and telephone numbers of Railroad's representatives who are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

4.0 Interference with Railroad Operations.

4.1 The Contractor shall arrange and conduct all work so that there shall be no interference with Railroad's operations, including train, signal, telephone and telegraphic services; or damage to Railroad's property; poles, wires and other facilities of tenants, licensees, easement grantees and invitees on Railroad's right of way. Whenever work may affect the operations or safety of trains, the Contractor shall first submit the method of doing this work to Railroad Engineer for approval, but such approval shall not relieve the Contractor from liability. The Contractor shall defer any of its work that requires flagging service or inspection service until the flagging service required by Railroad is available at the job site.

4.2 Whenever the Contractor's work within Railroad's right of way makes an impediment to Railroad's operations unavoidable, such as use of runaround tracks or necessity for reduced speed, the Contractor shall schedule and conduct these operations so that the impediment is reduced to the absolute minimum.

4.3 Should conditions arising from, or in connection with the work require immediate and unusual provisions to protect Railroad's operations and property, the Contractor shall make such provisions. If in the judgment of Railroad Engineer, or the Engineer if Railroad Engineer is absent, such provision is insufficient, Railroad Engineer or Engineer may require or provide

such provisions as deem necessary. In any event, such provisions shall be at the Contractor's expense and without cost to Railroad or Commission.

4.4 The Contractor shall be responsible for any damage to Railroad as a result of work on the Project, which shall include but not be limited to interference with the normal movement of trains caused exclusively by the work performed by the Contractor. The Contractor shall be responsible for damages for Railroad's train delays that are caused exclusively by the Contractor. Railroad agrees not to perform any act to unnecessarily cause any train delay. The damages for train delays per freight hour will be billed at an average rate per hour as determined from Railroad's records. Railroad shall provide these records Railroad, upon request, to Commission or Commission's contractor.

5.0 Track Clearances.

5.1 The minimum track clearances to be maintained by the Contractor during construction are shown on the Project plans. However, before undertaking any work within Railroad's right of way, or before placing any obstruction over any track, the Contractor shall:

- (a) Notify Railroad Engineer at least 72 hours in advance of the work.
- (b) Receive assurance from Railroad Engineer that arrangements have been made for flagging service as may be necessary.
- (c) Receive permission from Railroad Engineer to proceed with the work.
- (d) Ascertain that the Engineer has received copies of notice to Railroad and of Railroad's response.

5.2 The Contractor shall fully comply with any horizontal and vertical clearance requirements imposed by Missouri state statutes and regulations and Federal statutes and regulations regarding the placement of structures or equipment near or over railroad tracks.

6.0 Construction Procedures.

6.1 General. Construction work on Railroad's property shall be:

- (a) Subject to Railroad's inspection and review; and
- (b) In accordance with these Railroad Job Special Provisions.

6.2 Falsework. The Contractor shall be required to take special precaution and care to prevent any material from falling on Railroad's right of way. The procedure for preventing material from falling, including need of and plans for temporary falsework, shall first be approved by Railroad Engineer, but such approval shall not relieve the Contractor from liability. Before submission of plans to Railroad Engineer for approval, the Engineer will first review such plans.

6.3 Storage of Materials. The Contractor shall not store or stockpile construction materials or equipment closer than 25 feet to the centerline of the nearest railroad track or on Railroad's property not covered by construction easement, contractor's permit, lease or agreement. Additionally, the Contractor shall not store or leave materials or equipment within 250 feet of the edge of any highway/rail at-grade crossings. Further, both sides of a main track shall remain

unobstructed for a distance of 10 feet from the exterior edge of the track at all times to allow for stopped train inspection.

6.4 Cleanup. Upon completion of the work, the Contractor shall remove from within the limits of Railroad's right of way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the Contractor, and leave said right of way in a neat condition satisfactory to Railroad Engineer.

7.0 Damages. Railroad will not assume liability for any damages to the Contractor, contractor's work, employees, servants, equipment and materials caused by railroad traffic, except to the extent that any damage or claim has been proximately caused by Railroad's intentional misconduct or sole or gross negligence. Any cost incurred by Railroad for repairing damages to Railroad's property or to property of Railroad's tenants, licensees, easement grantees and invitees caused by or resulting from the Contractor's operations shall be paid directly to Railroad by the Contractor.

8.0 Flagging Services.

8.1 When Railroad Requires Flagging. Railroad shall have sole authority to determine when flagging is necessary to protect Railroad's operations from the Contractor's activities relating to this Project. Whenever Railroad reasonably determines that flagging is needed, Railroad shall provide all necessary flagging services in accordance with these Railroad Job Special Provisions and the Agreement between Commission and Railroad. The Contractor shall be responsible for arranging flagging services with Railroad, as required by Railroad, to accomplish the highway improvement. Railroad shall not unreasonably withhold or delay providing any flagging service that is needed pursuant to these Railroad Job Special Provisions.

8.1.1 In general, Railroad may require flagging services whenever the Contractor's personnel or equipment are, or are likely to be, working on Railroad's right of way within 25 feet of the centerline of any track, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or Railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging, or reasonable probability of accidental hazard to Railroad's operations or personnel. Normally, Railroad will assign one flagger to a project; but in some cases, more than one may be necessary, such as yard limits where 3 flaggers may be required.

8.1.2 However, if the Contractor works upon Railroad's right of way within distances that violate instructions given by Railroad Engineer, or performs work upon Railroad's right of way that has not been scheduled with Railroad Engineer, then Railroad may reasonably require one or more flaggers to be assigned full time until the contractor has completed all its work upon Railroad's right of way relating to this Project.

8.2 Scheduling and Notification of Flagging.

8.2.1 Not less than thirty (30) days before beginning work upon Railroad's right of way pursuant to this Project, the Contractor shall give Railroad Engineer advance written notice of the Contractor's intent to begin work within Railroad's right of way in accordance with these Railroad Job Special Provisions. These notices shall include sufficient details of the proposed work to enable the Railroad Engineer to determine if the Railroad will require flagging. If the Railroad requires flagging, the Contractor shall not perform any work until the flagger or flaggers are present at the job site. Arrangements for flagging shall be confirmed no later than 5:00 p.m.

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the Wednesday prior to the week before flagging services are needed. If any notices required to be given by this paragraph are in writing, the Contractor shall furnish the Engineer a copy; if notice is given verbally, the Contractor shall confirm that notice in writing with copy to the Engineer. The Contractor should address notification for flagging to:

Mr. Asim S. Raza
Chief Legal Officer, Director of Corporate Affairs
Terminal Railroad Association of St. Louis
1017 Olive Street, 5th Floor
St. Louis, Missouri 63101
Office: (314) 241-4729

After flagging begins, the flagger is assigned to work at the Project site on a continual basis until no longer needed and cannot provide flagging on a spot basis. If flagging becomes temporarily unnecessary and Railroad suspends flagging services, it may take up to 30 days after the Contractor's request to resume flagging services for this Project. Due to Railroad labor agreements, Railroad may require the Contractor to give ten (10) working days' notice before Railroad discontinues flagging services and ends the Contractor's responsibility for payment.

8.2.2 The Railroad flagger assigned to the Project shall notify the Engineer upon arrival at the job site on the first day, or as soon thereafter as possible, that flagging services have begun, and on the last day that flagger performs such services for each separate period that Railroad provides flagging services. The Engineer will document such notification in the Project records.

8.2.3 If, after the Railroad assigns a flagger to the Project site, emergencies arise which require the reassignment of the flagger elsewhere, then the Contractor shall delay work on Railroad's right of way until a flagger is again available. The Contractor, not Railroad, shall bear any additional costs resulting from this delay. Railroad shall resume flagging for this Project as soon as possible after the emergency has ended.

8.2.4 The Contractor shall provide a temporary structure to provide shelter from weather conditions for the person(s) providing flagging protection service on behalf of Railroad as described herein. The structure shall be provided in an area immediately accessible to Railroad's main track and the construction site, and be equipped with telephone service, lighting and desk.

8.3 Process for ordering on-track protection.

Once approval has been granted by Licensor for access to railroad property and/or operating right-of-way, a person to serve as an Employee in Charge of on-track safety (EIC) will be necessary at the work site to comply with federal regulations, railroad safety rules, and to protect track structure and signal assets.

To order EIC services please follow the instructions below:

Contact **RailPros Field Services**, Licensor's authorized EIC service provider using the contact information shown below:

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RailPros Field Services, Inc.
Email: trrainfo@railpros.com or
call; Phone: (877) 315-0513 x116

Once the project information is received, RailPros will send a quote for EIC services. To accept the cost and terms of service simply sign the quote and return it to RailPros via email to trrainfo@railpros.com. RailPros will work with your team and TRRA to schedule access to the railroad and for the EIC.

Advanced notice is greatly appreciated and will ensure greater availability to match your needs. We suggest contacting RailPros no less than ten (10) business days before your projected start date. If your start date is closer than that, please contact RailPros ASAP and they will work with you to see if they can accommodate your requested start date.

At the end of the month or the end of the project (whichever comes first), RailPros will send you an invoice directly for the services provided.

Please contact RailPros Field Services for additional information or to answer any questions.

9.0 Haul Across Railroads.

9.1 Where the plans show or imply that the Contractor or its suppliers must haul materials of any nature across Railroad's tracks, unless the plans clearly show that Commission has included arrangements for the haul in the agreement with Railroad, the Contractor shall be required to make all necessary arrangements with Railroad regarding means of transporting such materials across Railroad's tracks. The Contractor shall bear all costs incidental to these crossings, including flagging, whether services are performed by contractor's own forces or by Railroad's personnel.

9.2 The Contractor shall not establish any crossing for transporting materials or equipment across the tracks of Railroad unless specific authority for the installation, maintenance, necessary watching and flagging thereof and removal, all at the expense of the Contractor, is first obtained from the Railroad Engineer.

10.0 Work for the Contractor's Benefit. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the Project are shown on the plans, and are included in the agreement between Commission and Railroad, or will be covered by appropriate revisions to those documents, which shall be initiated and approved by Commission and/or Railroad. Should the Contractor desire any changes in addition to the above, then contractor shall make separate arrangements with Railroad for same to be accomplished at the Contractor's expense.

11.0 Cooperation and Delays. The Contractor shall cooperate with Railroad in scheduling any staged construction involving work by Railroad or its tenants, licensees, easement grantees and invitees. The Contractor shall ascertain in advance, from Railroad, the lead-time required for assembling crews and materials, and include sufficient time for that in its work scheduling. The Contractor may not assert any charge or claim against Commission or Railroad resulting from any hindrance or delay the Contractor experiences because of railway traffic relating to any construction work by Railroad, or any other delay that is reasonable or necessary to protect the safety of railway traffic, or any other delay resulting from any person's compliance with these Railroad Job Special Provisions.

12.0 Trainman's Walkways. The Contractor shall maintain an unobstructed continuous space suitable for trainman's use in walking along trains, which shall extend to a line not less than 12 feet from centerline of track, along the outer side of each exterior track of multiple operated track and on each side of single operated track. Before the close of each workday, the Contractor shall remove all temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railway's protective service is provided. Beside any excavation near the walkway, the Contractor shall install a handrail with a 12 feet minimum horizontal clearance from centerline of track.

13.0 Railroad Percentage of Contractor's Total Project Bid. The amount of work to be performed upon, over or under Railroad's right of way is estimated to be one (1%) percent of the Contractor's total bid for the Project.

14.0 Insurance Requirements.

Licensee shall procure and maintain for the duration of the contract, and for 3 years thereafter, insurance as noted below, against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Licensee, his agents, representatives, employees, or subcontractors.

14.1 Commercial General Liability. Insurance having a limit of not less than \$5,000,000 per Occurrence and \$10,000,000 in the Aggregate applying to each annual period for all loss or liability, including but not limited to attorneys' fees, Products and Completed Operations, Property Damage, Bodily Injury and Personal & Advertising Injury. Coverage must be purchased on Insurance Services Office Occurrence Form CG 00 01 or the equivalent. If the required minimum limits can only be met when applying an umbrella/excess liability policy, the umbrella/excess liability policy must follow form of the underlying policy and be endorsed to "drop down" to become primary in the event the primary limits are exhausted.

Commercial General Liability Policy shall include the following:

- Bodily Injury (including death) and Property Damage
- Definition of bodily injury shall include mental anguish
- Personal Injury and Advertising Injury
- Fire legal liability
- Products and Completed Operations (endorsed for 3 years after completion of work)
- "explosion, collapse, and underground hazard" ("XCU") coverage
- Include a severability of interests provision
- The definition of insured contract must not include any exclusion or other limitation for any services being done within 50 feet of Railroad's tracks (Endorsement CG 2417)
- Policies must not contain any punitive damages exclusion
- A per project aggregate limit must apply

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•It is agreed that any workers' compensation exclusion does not apply to Railroad's payments related to the Federal Employers Liability ACT or a Railroad Wage Continuation Program or similar programs and any payments made are deemed not to be either payments made or obligations assumed under any workers' compensation, disability benefits, or unemployment compensation law or similar law.

14.2 Workers Compensation Insurance must include coverage for:

Licensee's statutory liability under the worker's compensation laws of the state(s) in which the services are to be performed.

Employers' Liability (Part B) with limits of at least \$1,000,000 each accident, \$1,000,000 by disease policy limit, \$1,000,000 by disease each employee.

14.3 Commercial Automobile Liability insurance must contain the following coverage and limits:

A minimum limit of \$2,000,000 per accident applying to each annual period written on Insurance Services Office Form Number CA 0001 covering Bodily Injury and Property Damage.

Any and all motor vehicles owned, non-owned, used or hired must be covered (Symbol 1) and mobile equipment must be covered to the extent it may be excluded from the general liability insurance.

All policies must be endorsed with the following:

- CA 2070 or equivalent
- MCS-90 endorsement (if applicable for contract)

14.4 Professional Liability Insurance with limits of not less than \$2,000,000 Per Claim and \$2,000,000 aggregate applying to each annual period, subject to a deductible or self-insured retention not to exceed \$50,000 per occurrence (unless approved in advance by TRRA) covering claims arising out of alleged or actual negligence in the rendering or failure to render professional services related to the Work under this Agreement. Coverage shall be written on a claim-made form with a retroactive date preceding the date this Agreement was executed. Licensee shall use best efforts to renew this coverage with the same terms, conditions and limits for at least three years following the termination of this Agreement. Defense costs shall be included within the limits of liability specified above.

14.5 Licensee's Pollution Liability Insurance of not less than \$10,000,000 Per Claim and \$10,000,000 aggregate applying to each annual period, subject to a deductible or self-insured retention not to exceed \$25,000 per occurrence (unless approved on advance by TRRA) covering bodily injury, property damage including Natural Resource Damage) environmental damage, cleanup costs and defense of third-party claims caused by pollution conditions arising out of the Work under this Agreement. Coverage may be written on an occurrence or claims- made form, but if claims-made coverage is provided, Licensee agrees to use best efforts to renew the coverage with the same terms, conditions and limits for at least three years following the termination of this Agreement. Coverage shall be provided for claims arising out of pollution conditions occurring at non-owned disposal sites and for transportation of materials, including wastes to or from a site where covered operations are conducted.

14.6 Railroad Protective Liability Insurance having a combined single limit of not less than \$5,000,000 each occurrence and \$10,000,000 in the aggregate applying separately to each annual period. Said policy shall provide coverage for all loss, damage or expense arising from bodily injury and property damage liability, and physical damage to property attributed to acts or omissions at the job site. The standards for the Railroad Protective Liability Insurance are as follows:

- The policy shall be written on a standard ISO form CG 0035 or equivalent.
- The named Insured shall be identified as the Railroad
- Policy shall be endorsed to include broad form coverage for property damage "Physical Damage to Property Definition Amendment"
- Sudden and Accidental Pollution
- Evacuation Expenses

14.7 Property Insurance, insuring Licensee's property of every kind and description and of persons claiming by or through Licensee against those risks normally encompassed in an "all-risk" policy, including, but not limited to, (1) loss or damage by fire; (2) loss or damage from such other risk or hazards now or hereafter embraced by an "extended coverage endorsement", (3) loss for flood if the area/property upon which Licensee is working is a designated flood or flood insurance area; and (4) such other risks as reasonably prudent owner of similar property in the locality where the work area is located would normally insure against. Such insurance shall provide for the full replacement cost in the event of a total destruction of Licensee's property.

14.8 Other Requirements

- Railroad its officers, officials, employees, and volunteers must be identified as an additional insured on all policies except workers compensation and Professional Liability and be the named insured on the railroad protective policy.
- No Punitive Damages Exclusions: All policies must not contain an exclusion for punitive damages.
- Waivers of Recovery and Subrogation: Licensee agrees to waive its right of recovery against Railroad for all claims and suits against Railroad with the exception of the Professional Liability claims. In addition, its insurers with the exception of the Professional Liability insurers, through the terms of the policy or policy endorsement, must waive their right of subrogation against Railroad for all claims and suits. The certificate of insurance must reflect the waiver of subrogation. Licensee further waives its right of recovery, and its insurers must also waive their right of subrogation against Railroad for loss of its owned or leased property or property under Licensee's care custody and control.
- Primary and Non-contributory: Licensee's insurance policies through policy endorsement must include wording which states that the policy is primary and non-contributory with respect to any insurance carried by Railroad. The certificate of insurance must reflect that the above wording is included in evidenced policies.
- Separation of insureds. All policies must contain a separation of insureds provision except workers compensation. Separation of insureds must be indicated on the certificate of

insurance.

•Each insurance policy required by this clause shall provide that coverage shall not be canceled, except with notice to the Railroad.

14.9 Acceptability of Insurers: Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII, unless otherwise acceptable to the Railroad.

14.10 Self-Insurance: Licensee is not allowed to self-insure without the prior written consent of Railroad. If granted by Railroad, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by Licensee in lieu of insurance. Any and all Railroad liabilities that would otherwise in accordance with the provisions of the Agreement, be covered by Licensee's insurance will be covered as if Licensee elected not to include a deductible, self-insured retention or other financial responsibility for claims.

14.11 Independent Associates, Consultants and Subcontractors: If any portion of the services are to be subcontracted by contractor, Licensee must require that the independent associates consultant and/or subcontractor provide and maintain the insurance coverages set forth herein, naming Railroad as an additional insured and requiring that the independent associate, consultant, and/or subcontractor release, defend and indemnify Railroad to the same extent and under the same terms and conditions as Licensee is required to release, defend and indemnify Railroad herein.

14.12 No Limits: The fact that insurance (including without limitation, self-insurance) is obtained by Licensee will not be deemed to release or diminish the liability of Licensee including, without limitation, liability under the indemnity provisions of the agreement. Damages recoverable by Railroad will not be limited by the amount of the required insurance.

14.13 Verification of Coverage: Licensee shall furnish the Railroad with original certificates and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this contract. All certificates and endorsements are to be received and approved by the Railroad before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Licensee's obligation to provide them. The Railroad reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

14.14 Prior to entry on Railroad's Property, the original Railroad Protective Liability Insurance Policy shall be submitted by the prime Contractor to the Railroad at the address below for review and approval by the Railroad. In addition, certificates of insurance evidencing the Contractor's and any subcontractor's Commercial General Liability Insurance shall be issued to the Railroad and the Commission at the addresses below. The certificates of insurance shall state that the insurance coverage will not be suspended, voided, canceled, or reduced in coverage or limits without 30 days advanced written notice to Railroad and the Commission. No work will be permitted on the Railroad's Property until the Railroad has reviewed and approved the evidence of insurance required herein.

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Railroad

Mr. Asim S. Raza
Chief Legal Officer, Director of
Corporate Affairs
Terminal Railroad Assoc. of St. Louis
1017 Olive Street, 5th Floor
St. Louis, MO 63101

Commission

Mr. David Ahlvers
State Construction and Materials Engineer
MoDOT
P.O. Box 270
Jefferson City, MO 65102

15.0 Guidelines for Personnel on Railroad's Right of Way.

15.1 All persons shall wear hard hats. Appropriate eye and hearing protection shall be used. Working in shorts shall be prohibited. Shirts shall cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip-on type boots shall be prohibited. Hard-sole, lace-up footwear, zippered boots or boots cinched up with straps which fit snugly about the ankle shall be adequate. Safety boots are strongly recommended.

15.2 No one shall be allowed within 25 feet of the centerline of track without specific authorization from the flagger.

15.3 All persons working near track while train is passing shall lookout for dragging bands, chains and protruding or shifted cargo.

15.4 No one shall be allowed to cross tracks without specific authorization from the flagger.

15.5 All welders and cutting torches working within 25 feet of track shall stop when train is passing.

15.6 No steel tape or chain shall be allowed to cross or touch rails without permission.

16.0 Guidelines for Equipment on Railroad's Right of Way.

16.1 No crane or boom equipment shall be allowed to set up to work or park within boom distance plus 15 feet of centerline of track without specific permission from the Railroad Engineer and flagger.

16.2 No crane or boom equipment shall be allowed to foul track or lift a load over the track without flag protection and track time.

16.3 All employees shall stay with their machines when crane or boom equipment is pointed toward track.

16.4 All cranes and boom equipment under load shall stop work while train is passing, including pile driving.

16.5 Swinging loads shall be secured to prevent movement while train is passing.

16.6 No loads shall be suspended above a moving train.

16.7 No equipment shall be allowed within 25 feet of centerline of track without specific authorization of the flagger.

16.8 Trucks, tractors or any equipment shall not touch ballast line without specific permission from Railroad Engineer and flagger.

16.9 No equipment or load movement shall be within 25 feet or above a standing train or railroad equipment without specific authorization of the flagger.

16.10 All operating equipment within 25 feet of track shall halt operations when a train is passing. The flagger may halt all other operating equipment if the flagger views the operation to be dangerous to the passing train.

16.11 All equipment, loads and cables shall be prohibited from touching rails.

16.12 While clearing and grubbing, no vegetation shall be removed from railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagger.

16.13 No equipment or materials shall be parked or stored on the Railroad's Property unless specific authorization is granted from the Railroad Engineer.

16.14 All unattended equipment that is left parked on the Railroad's Property shall be effectively immobilized so that unauthorized persons cannot move it.

16.15 All cranes and boom equipment shall be turned away from track after each workday or whenever unattended by an operator.

17.0 Legal Compliance and Hazardous Materials Reporting. Contractor shall comply with all applicable federal, state and local governmental laws and regulations—including the Resource Conservation and Recovery Act, the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation and Liability Act, and other environmental, health and safety laws and regulations to the extent these requirements are applicable to the Contractor's work performed under this contract. Notwithstanding the preceding sentence, the Contractor will not be liable for pre-existing hazardous materials or hazardous substances discovered on Railroad's property or right of way so long as the Contractor's work, acts or omissions did not cause them to be there. If the Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including any non-containerized commodity or material, on or adjacent to Railroad's property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this special provision, the Contractor shall immediately:

(a) Notify Railroad of such discovery, by telephoning (618) 451-8478.

(b) Take safeguards necessary to protect employees, subcontractors, agents and/or third parties.

(c) Exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of the release.

18.0 Personal Injury Reporting. Railroad must report certain injuries as a part of compliance with Federal Railroad Administration ("FRA") reporting requirements. The Contractor immediately shall report any personal injury to any employee of the Contractor, subcontractor or

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contractor's invitees while on Railroad's property, by phone, mail or preferably in person, to the Railroad Engineer. The Contractor shall complete the Non-Employee Personal Injury Data Collection Form and send it by Fax to Railroad Engineer no later than the close of shift on the date of the injury.

19.0 Failure to Comply. If the Contractor violates or fails to comply with any of the requirements of these Railroad Job Special Provisions, the Railroad may act as authorized in paragraphs (a) and (b) of this section, until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

(a) The Railroad Engineer may require the Contractor to vacate Railroad's property.

(b) The Engineer may withhold all monies due to the Contractor until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

20.0 Payment for Cost of Compliance. Commission shall not separately pay for any extra cost the Contractor or Railroad incurs on account of compliance with these Railroad Job Special Provisions. The Contractor and Railroad shall include all such cost in the contract unit price for other items included in the contract. Railroad will not pay the Contractor for any work it performs to comply with these Railroad Job Special Provisions.

Y. Special Provisions for Protection of Norfolk Southern Railway Interest

1.0 Authority of Railroad Engineer and Department Engineer:

1.1 The authorized representative of the Railroad Company, hereinafter referred to as Railroad Engineer, shall have final authority in all matters affecting the safe maintenance of Railroad traffic of his Company including the adequacy of the foundations and structures supporting the Railroad tracks. For Public Projects impacting Norfolk Southern, the Public Projects Engineer will serve as the Railroad Engineer.

1.2 The authorized representative of the Department, hereinafter referred to as the Department Engineer, shall have authority over all other matters as prescribed herein and in the Project Specifications.

1.3 The Contractor must adhere to all other Norfolk Southern policies and procedures not specifically mentioned in these special provisions. These can be found in the Norfolk Southern Public Projects Guidelines at the link below:

<http://www.nscorp.com/content/nscorp/en/transportation-terms/other-requirements/public-project-guidelines.html>

2.0 Notice of Starting Work:

2.1 Department's Prime contractor shall not commence any work on railroad rights-of-way until he has complied with the following conditions:

2.1.1 Signed and received a fully executed copy of the required Norfolk Southern Contractor Non-Environmental Right of Entry Agreement obtained through the following link:

<http://www.nscorp.com/content/nscorp/en/real-estate/norfolk-southern-services/access-norfolk-southern-property.html>

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There is a \$1,250 application review fee.

2.1.2 Given the Railroad written notice in electronic format to the Railroad Engineer, with copy to the Department Engineer who has been designated to be in charge of the work, at least ten days in advance of the date he proposes to begin work on Railroad rights-of-way.

2.1.3 Obtained written approval from the Railroad of Railroad Protective Liability Insurance coverage as required by paragraph 14 herein. It should be noted that Railroad Company does not accept notation of Railroad Protective insurance on a certificate of liability insurance form or Binders as Railroad Company must have the full original or certified true electronic countersigned policy submitted electronically to NSRISK3@NSCORP.COM. Further, please note that mere receipt of the policy is not the only issue but review for compliance. Due to the number of projects system-wide, it typically takes a minimum of 30-45 days for Railroad Company to review.

2.1.4 Obtained Railroad's Flagging Services as required by paragraph 7 herein.

2.1.5 Obtained written authorization from the Railroad to begin work on Railroad rights-of-way, such authorization to include an outline of specific conditions with which he must comply.

2.1.6 Furnished a schedule for all work within the Railroad rights-of-way as required by paragraph 7.2.2.

2.2 The Railroad's written authorization to proceed with the work shall include the names, addresses, and telephone numbers of the Railroad's representatives who are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

2.3 Norfolk Southern representative contact information: Jake Watson, Public Projects Engineer, Telephone: 404-529-1225; email Jacob.Watson@nscorp.com.

3.0 . Interference with Railroad Operations:

3.1 The Contractor shall so arrange and conduct his work that there will be no interference with Railroad operations, including train, signal, telephone and telegraphic services, or damage to the property of the Railroad Company or to poles, wires, and other facilities of tenants on the rights-of-way of the Railroad Company. Whenever work is liable to affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor which requires flagging service or inspection service shall be deferred by the Contractor until the flagging service or inspection service required by the Railroad is available at the job site.

3.2 Whenever work within Railroad rights-of-way is of such a nature that impediment to Railroad operations such as use of runaround tracks or necessity for reduced speed is unavoidable, the Contractor shall schedule and conduct his operations so that such impediment is reduced to the absolute minimum.

3.3 Should conditions arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of the Railroad, the Contractor

shall make such provisions. If in the judgment of the Railroad Engineer, or in his absence, the Railroad's Division Engineer, such provisions is insufficient, either may require or provide such provisions as he deems necessary. In any event, such unusual provisions shall be at the Contractor's expense and without cost to the Railroad or the Department.

3.4. "One Call" Services do not locate buried railroad utilities. The contractor shall contact the railroad's representative 2 days in advance of work at those places where excavation, pile driving, or heavy loads may damage railroad underground facilities. Upon request from the contractor or agency, railroad forces will locate and paint mark or flag railroad underground facilities. The contractor shall avoid excavation or other disturbances of these facilities. If disturbance or excavation is required near a buried railroad facility, the contractor shall coordinate with the railroad to have the facility potholed manually with careful hand excavation. The facility shall be protected by the contractor during the course of the disturbance under the supervision and direction of the railroad representative.

4.0 Track Clearances:

4.1 The minimum track clearances to be maintained by the Contractor during construction are shown on the Project Plans. If temporary clearances are not shown on the project plans, the following criteria shall govern the use of falsework and formwork above or adjacent to operated tracks.

4.1.1 A minimum vertical clearance of 22'-0" above top of highest rail shall be maintained at all times.

4.1.2 A minimum horizontal clearance of 13'-0" from centerline of tangent track or 14'-0" from centerline of curved track shall be maintained at all times. Additional horizontal clearance may be required in special cases to be safe for operating conditions. This additional clearance will be as determined by the Chief Engineer Bridges & Structures

4.1.3 All proposed temporary clearances which are less than those listed above must be submitted to the Chief Engineer Bridges & Structures for approval prior to construction and must also be authorized by the regulatory body of the State if less than the legally prescribed clearances.

4.1.4 The temporary clearance requirements noted above shall also apply to all other physical obstructions including, but not limited to: stockpiled materials, parked equipment, placement or driving of piles, and bracing or other construction supports.

4.2 Before undertaking any work within Railroad right-of-way, and before placing any obstruction over any track, the Contractor shall:

4.2.1 Notify the Railroad's representative at least 72 hours in advance of the work.

4.2.2 Receive assurance from the Railroad's representative that arrangements have been made for flagging service as may be necessary.

4.2.3 Receive permission from the Railroad's representative to proceed with the work.

4.2.4 Ascertain that the Department Engineer has received copies of notice to the Railroad and of the Railroad's response thereto.

5.0 Construction Procedures:

5.1 General:

5.1.1 Construction work and operations by the Contractor on Railroad property shall be:

- a. Subject to the inspection and approval of the Railroad or their designated Construction Engineering Representative.
- b. In accord with the Railroad's written outline of specific conditions.
- c. In accord with the Railroad's general rules, regulations and requirements including those relating to safety, fall protection and personal protective equipment.
- d. In accord with these Special Provisions.

5.1.2 Submittal Requirements

- a. The contractor shall submit all construction related correspondence and submittals electronically to the Railroad Engineer.
- b. The contractor shall allow for 30 days for the Railroad's review and response.
- c. All work in the vicinity of the Railroad's property that has the potential to affect the Railroad's train operations or disturb the Railroad's Property must be submitted and approved by the Railroad prior to work being performed.
- d. All submittals and calculations must be signed and sealed by a registered engineer licensed in the state of the project work.
- e. All submittals shall first be approved by the Department Engineer and the Railroad Engineer, but such approval shall not relieve the Contractor from liability.
- f. For all construction projects, the following submittals, but not limited to those listed below, shall be provided for review and approval when applicable:
 - i. General Means and Methods
 - ii. Construction Excavation & Shoring
 - iii. Pipe, Culvert, & Tunnel Installations
 - iv. Demolition Procedure
 - v. Erection & Hoisting Procedure
 - vi. Debris Shielding or Containment
 - vii. Blasting
 - viii. Roadway Protection
 - ix. Formwork for the bridge deck, diaphragms, overhang brackets, and protective platforms
 - x. Bent Cap Falsework. A lift plan will be required if the contractor want to move the falsework over the tracks.

g. For Undergrade Bridges (Bridges carrying the Railroad) the following submittals in addition to those listed above shall be provided for review and approval:

- i. Shop Drawings
- ii. Bearing Shop Drawings and Material Certifications
- iii. Concrete Mix Design
- iv. Structural Steel, Rebar, and/or Strand Certifications
- v. 28 day Cylinder Test for Concrete Strength
- vi. Waterproofing Material Certification
- vii. Test Reports for Fracture Critical Members
- viii. Foundation Construction Reports
(Fabrication may not begin until the Railroad has approved the required shop drawings.)

h. The Contractor shall include in all submissions a detailed narrative indicating the progression of work with the anticipated timeframe to complete each task. Work will not be permitted to commence until the Contractor has provided the Railroad with a satisfactory plan that the project will be undertaken without scheduling, performance or safety related issues. Submission shall also provide a listing of the anticipated equipment to be used, the location of all equipment to be used and insure a contingency plan of action is in place should a primary piece of equipment malfunction.

i. Payment for plan submittal, Railroad plan review and Railroad inspection fees. The contractor shall be responsible for all costs associated with the generation and submittal of Railroad plans required for the right of entry agreement. The Commission will be responsible for and directly pay the Railroad for all Railroad review fees associated with these plan submittals and any onsite inspection and management fees charged by the Railroad.

5.2 Track Monitoring

5.2.1 At the direction of the Railroad Engineer, any activity that has the potential to disturb the Railroad track structure may require the contractor to submit a detailed track monitoring program for approval by the Railroad Engineer.

5.2.2 The program shall specify the survey locations, the distance between the location points, and frequency of monitoring before, during, and after construction. Railroad reserves the right to modify the survey locations and monitoring frequency as necessary during the project.

5.2.3 The survey data shall be collected in accordance with the approved frequency and immediately furnished to the Railroad Engineer for analysis.

5.2.4 If any movement has occurred as determined by the Railroad Engineer, the Railroad will be immediately notified. Railroad, at its sole discretion, shall have the right to immediately require all contractor operations to be ceased and determine what corrective action is required. Any corrective action required by the Railroad or performed by the Railroad including the monitoring of corrective action of the contractor will be at project expense.

5.3 Roadway Protection

5.3.1 The Contractor shall submit the proposed roadway protection system detailing the specific filter fabric and anchorage system to be used during construction activities.

5.3.2 The roadway protection is to extend 25' beyond the proposed limit of work and be continuously maintained to prevent all contaminants from entering the ballast section of all tracks for the entire duration of the project.

5.4 Maintenance of Railroad Facilities:

5.4.1 The Contractor will be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from his operations and provide and maintain any erosion control measures as required. The Contractor will promptly repair eroded areas within Railroad rights-of-way and repair any other damage to the property of the Railroad or its tenants.

5.4.2 If, in the course of construction, it may be necessary to block a ditch, pipe or other drainage facility, temporary pipes, ditches or other drainage facilities shall be installed to maintain adequate drainage, as approved by NS. Upon completion of the work, the temporary facilities shall be removed and the permanent facilities restored.

5.4.3 All such maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.

5.5 Storage of Materials and Equipment:

5.5.1 Materials and equipment shall not be stored where they will interfere with Railroad operations, nor on the rights-of-way of the Railroad Company without first having obtained permission from the Railroad Engineer, and such permission will be with the understanding that the Railroad Company will not be liable for damage to such material and equipment from any cause and that the Railroad Engineer may move or require the Contractor to move, at the Contractor's expense, such material and equipment.

5.5.2 All grading or construction machinery that is left parked near the track unattended by a watchman shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Contractor shall protect, defend, indemnify and save Railroad, and any associated, controlled or affiliated corporation, harmless from and against all losses, costs, expenses, claim or liability for loss or damage to property or the loss of life or personal injury, arising out of or incident to the Contractor's failure to immobilize grading or construction machinery.

5.6 Cleanup:

5.6.1 Upon completion of the work, the Contractor shall remove from within the limits of the Railroad rights-of-way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the Contractor, and leave said rights-of-way in a neat condition satisfactory to the Chief Engineer of the Railroad or his authorized representative.

6.0 Damages:

6.1 The Contractor shall assume all liability for any and all damages to his work, employees, servants, equipment, and materials caused by Railroad traffic.

6.2 Any cost incurred by the Railroad for repairing damages to its property or to property of its tenants, caused by or resulting from the operations of the Contractor, shall be paid directly to the Railroad by the Contractor.

7.0 Flagging Services:

7.1 Requirements:

7.1.1 If required for the project, Flagging services will not be provided until the contractor's insurance has been reviewed & approved by the Railroad.

7.1.2 Under the terms of the agreement between the Department and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect its operations. In general, the requirements of such services will be whenever the Contractor's personnel or equipment are or are likely to be, working on the Railroad's right-of-way, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging.

7.1.3 Normally, the Railroad will assign one flagman to a project; but in some cases, more than one may be necessary, such as yard limits where three (3) flagmen may be required. However, if the Contractor works within distances that violate instructions given by the Railroad's authorized representative or performs work that has not been scheduled with the Railroad's authorized representative, a flagman or flagmen may be required full time until the project has been completed.

7.1.4 For projects exceeding 30 days of construction, the Contractor shall provide the flagmen a small work area with a desk/counter and chair within the field/site trailer, including the use of bathroom facilities, where the flagman can check in/out with the Project, as well as to the flagman's home terminal. The work area should provide access to two (2) electrical outlets for recharging radio(s), and a laptop computer; and have the ability to print off needed documentation and orders as needed at the field/site trailer. This should aid in maximizing the flagman's time and efficiency on the Project.

7.2 Scheduling and Notification:

7.2.1 The Contractor's work requiring railroad flagging should be scheduled to limit the presence of a flagman at the site to a maximum of 50 hours per week. The Contractor shall receive Railroad approval of work schedules requiring a flagman's presence in excess of 40 hours per week.

7.2.2 Not later than the time that approval is initially requested to begin work on Railroad right-of-way, Contractor shall furnish to the Railroad and the Department a schedule for all work required to complete the portion of the project within Railroad right-of-way and arrange for a job site meeting between the Contractor, the Department, and the Railroad's authorized representative. Flagman or Flagmen may not be provided until the job site meeting has been conducted and the Contractor's work scheduled.

7.2.3 The Contractor will be required to give the Railroad representative at least 10 working days of advance written notice of intent to begin work within Railroad right-of-way in accordance with this special provision. Once begun, when such work is then suspended at any time, or for

any reason, the Contractor will be required to give the Railroad representative at least 3 working days of advance notice before resuming work on Railroad right-of-way. Such notices shall include sufficient details of the proposed work to enable the Railroad representative to determine if flagging will be required. If such notice is in writing, the Contractor shall furnish the Engineer a copy; if notice is given verbally, it shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagman, or flagmen are present at the job site. It may take up to 30 days to obtain flagging initially from the Railroad. When flagging begins, the flagman is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for on a spot basis. If flagging becomes unnecessary and is suspended, it may take up to 30 days to again obtain from the Railroad. Due to Railroad labor agreements, it is necessary to give 5 working days notice before flagging service may be discontinued and responsibility for payment stopped.

7.2.4 If, after the flagman is assigned to the project site, an emergency arises that requires the flagman's presence elsewhere, then the Contractor shall delay work on Railroad right-of-way until such time as the flagman is again available. Any additional costs resulting from such delay shall be borne by the Contractor and not the Department or Railroad.

7.3 Payment:

7.3.1 The Department will be responsible for paying the Railroad directly for any and all costs of flagging which may be required to accomplish the construction. These costs will be deducted from the contractor's payments.

7.3.2 The estimated cost of flagging is current rate per day based on a 10-hour work day (approximately \$1,000 per day). This cost includes the base pay for the flagman, overhead, and includes a per diem charge for travel expenses, meals and lodging. The charge to the Department by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required.

7.3.3 Work by a flagman in excess of 8 hours per day or 40 hours per week, but not more than 12 hours a day will result in overtime pay at 1 and 1/2 times the appropriate rate. Work by a flagman in excess of 12 hours per day will result in overtime at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 and 1/2 times the normal rate.

7.3.4 Railroad work involved in preparing and handling bills will also be charged to the Department. Charges to the Department by the Railroad shall be in accordance with applicable provisions of Subchapter B, Part 140, Subpart I and Subchapter G, Part 646, Subpart B of the Federal-Aid Policy Guide issued by the Federal Highway Administration on December 9, 1991, including all current amendments. Flagging costs are subject to change. The above estimates of flagging costs are provided for information only and are not binding in any way.

7.4 Verification:

7.4.1 Railroad's flagman will electronically enter flagging time via Railroad's electronic billing system. Any complaints concerning flagging must be resolved in a timely manner. If the need for flagging is questioned, please contact Railroad's System Engineer - Public Improvements. All verbal complaints will be confirmed in writing by the Contractor within 5 working days with a copy to the Department's Engineer. Address all written correspondence electronically to Railroad's System Engineer - Public Improvements:

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7.4.2 The Railroad flagman assigned to the project will be responsible for notifying the Department Engineer upon arrival at the job site on the first day (or as soon thereafter as possible) that flagging services begin and on the last day that he performs such services for each separate period that services are provided. The Department Engineer will document such notification in the project records. When requested, the Department Engineer will also sign the flagman's diary showing daily time spent and activity at the project site.

8.0 Haul Across Railroad:

8.1 Where the plans show or imply that materials of any nature must be hauled across a Railroad, unless the plans clearly show that the Department has included arrangements for such haul in its agreement with the Railroad, the Contractor will be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad. The Contractor or Agency will be required to bear all costs incidental to such crossings whether services are performed by his own forces or by Railroad personnel.

8.2 No crossing may be established for use of the Contractor for transporting materials or equipment across the tracks of the Railroad Company unless specific authority for its installation, maintenance, necessary watching and flagging thereof and removal, until a temporary private crossing agreement has been executed between the Contractor and Railroad. The approval process for an agreement normally takes 90-days.

9.0 Work for the Benefit of the Contractor:

9.1 All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans; included in the force account agreement between the Department and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the Department and/or the Railroad.

9.2 Should the Contractor desire any changes in addition to the above, then he shall make separate arrangements with the Railroad for same to be accomplished at the Contractor's expense.

10.0 Cooperation and Delays:

10.1 It shall be the Contractor's responsibility to arrange a schedule with the Railroad for accomplishing stage construction involving work by the Railroad or tenants of the Railroad. In arranging his schedule he shall ascertain, from the Railroad, the lead time required for assembling crews and materials and shall make due allowance therefore.

10.2 No charge or claim of the Contractor against either the Department or the Railroad Company will be allowed for hindrance or delay on account of railway traffic; any work done by the Railway Company or other delay incident to or necessary for safe maintenance of railway traffic or for any delays due to compliance with these special provisions.

11.0 Trainman's Walkways:

11.1 Along the outer side of each exterior track of multiple operated track, and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending to a line not less than 10 feet from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or

obstructions allowed during work hours while Railway's protective service is provided shall be removed before the close of each work day. If there is any excavation near the walkway, a handrail, with 10'-0" minimum clearance from centerline of track, shall be placed and must conform to AREMA and/or FRA standards.

12.0 Guidelines for Personnel on Railroad Right-Of-Way:

12.1 The Contractor and/or the Agency's personnel authorized to perform work on Norfolk Southern's property as specified in Section 2 above are not required to complete Norfolk Southern Roadway Worker Protection Training; However the Contractor and the Agency's personnel must be familiar with Norfolk Southern's standard operating rules and guidelines, should conduct themselves accordingly, and may be removed from the property for failure to follow these guidelines.

12.2 All persons shall wear hard hats. Appropriate eye and hearing protection must be used. Working in shorts is prohibited. Shirts must cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip-on type boots is prohibited. Hard-sole, lace-up footwear, zippered boots or boots cinched up with straps which fit snugly about the ankle are adequate. Wearing of safety boots is strongly recommended. In the vicinity of at-grade crossings, it is strongly recommended that reflective vests be worn.

12.3 No one is allowed within 25' of the centerline of track without specific authorization from the flagman.

12.4 All persons working near track while train is passing are to lookout for dragging bands, chains and protruding or shifted cargo.

12.5 No one is allowed to cross tracks without specific authorization from the flagman.

12.6 All welders and cutting torches working within 25' of track must stop when train is passing.

12.7 No steel tape or chain will be allowed to cross or touch rails without permission from the Railroad.

13.0 Guidelines for Equipment on Railroad Right-Of-Way:

13.1 No crane or boom equipment will be allowed to set up to work or park within boom distance plus 15' of centerline of track without specific permission from railroad official and flagman.

13.2 No crane or boom equipment will be allowed to foul track or lift a load over the track without flag protection and track time.

13.3 All employees will stay with their machines when crane or boom equipment is pointed toward track.

13.4 All cranes and boom equipment under load will stop work while train is passing (including pile driving).

13.5 Swinging loads must be secured to prevent movement while train is passing.

13.6 No loads will be suspended above a moving train.

13.7 No equipment will be allowed within 25' of centerline of track without specific authorization of the flagman.

13.8 Trucks, tractors or any equipment will not touch ballast line without specific permission from railroad official and flagman. Orange construction fencing may be required as directed.

13.9 No equipment or load movement within 25' or above a standing train or railroad equipment without specific authorization of the flagman.

13.10 All operating equipment within 25' of track must halt operations when a train is passing. All other operating equipment may be halted by the flagman if the flagman views the operation to be dangerous to the passing train.

13.11 All equipment, loads and cables are prohibited from touching rails.

13.12 While clearing and grubbing, no vegetation will be removed from railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagman.

13.13 No equipment or materials will be parked or stored on Railroad's property unless specific authorization is granted from the Railroad Engineer.

13.14 All unattended equipment that is left parked on Railroad property shall be effectively immobilized so that it cannot be moved by unauthorized persons.

13.15 All cranes and boom equipment will be turned away from track after each work day or whenever unattended by an operator.

13.16 Prior to performing any crane operations, the contractor shall establish a single point of contact for the Railroad flagman to remain in communication with at all times. Person must also be in direct contact with the individual(s) directing the crane operation(s).

14.0 Insurance: The amount of work to be performed upon, over or under Railroad's right of way is estimated to be 1 percent of the contractor's total bid for the project.

14.1 In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, the Prime Contractor will be required to carry insurance of the following kinds and amounts:

14.1.1 Commercial General Liability Insurance having a combined single limit of not less than \$2,000,000 per occurrence for all loss, damage, cost and expense, including attorneys' fees, arising out of bodily injury liability and property damage liability during the policy period. Said policy shall include explosion, collapse, and underground hazard (XCU) coverage, shall be endorsed to name Railroad specified in item 14.1.4.c. below both as the certificate holder and as an additional insured, and shall include a severability of interests provision.

14.1.2 Automobile Liability Insurance with a combined single limit of not less than \$1,000,000 each occurrence for injury to or death of persons and damage to or loss or destruction of property. Said policy or policies shall be endorsed to name Railroad specified in item 14.1.4.c below both as the certificate holder and as an additional insured and shall include a severability of interests provision.

14.1.3 Railroad Protective Liability Insurance having a combined single limit of not less than \$5,000,000 each occurrence and \$10,000,000 in the aggregate applying separately to each annual period. If the project involves track over which passenger trains operate, the insurance limits required are not less than a combined single limit of \$5,000,000 each occurrence and \$10,000,000 in the aggregate applying separately to each annual period. Said policy shall provide coverage for all loss, damage or expense arising from bodily injury and property damage liability, and physical damage to property attributed to acts or omissions at the job site.

14.1.4 The standards for the Railroad Protective Liability Insurance are as follows:

- a. The insurer must be rated A- or better by A.M. Best Company, Inc.

Note: NS does not accept from insurers Chartis (AIG or Affiliate Company including Lexington Insurance Company), Hudson Group or Liberty or Affiliated Company.

- b. The policy must be written using one of the following combinations of Insurance Services Office ("ISO") Railroad Protective Liability Insurance Form Numbers:

- i. CG 00 35 01 96 and CG 28 31 10 93; or
- ii. CG 00 35 07 98 and CG 28 31 07 98; or
- iii. CG 00 35 10 01; or
- iv. CG 00 35 12 04; or
- v. CG 00 35 12 07; or
- vi. CG 00 35 04 13.

- c. The named insured shall read:

Norfolk Southern Corporation and Its Subsidiaries
Three Commercial Place
Norfolk, Virginia 23510-2191
Attn: Risk Management

- d. The description of operations must appear on the Declarations, must match the project description in this agreement, and must include the appropriate Department project and contract identification numbers.

- e. The job location must appear on the Declarations and must include the city, state, and appropriate highway name/number. NOTE: Do not include any references to milepost on the insurance policy.

- f. The name and address of the prime contractor must appear on the Declarations.

- g. The name and address of the Department must be identified on the Declarations as the "Involved Governmental Authority or Other Contracting Party."

- h. Endorsements/forms that are required are:

- i. Physical Damage to Property Amendment
- ii. Terrorism Risk Insurance Act (TRIA) coverage must be included

- i. Other endorsements/forms that will be accepted are:

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- i. Broad Form Nuclear Exclusion – Form IL 00 21
- ii. 30-day Advance Notice of Non-renewal or cancellation
- iii. Required State Cancellation Endorsement
- iv. Quick Reference or Index Form CL/IL 240

j. Endorsements/forms that are NOT acceptable are:

- i. Any Pollution Exclusion Endorsement except CG 28 31
- ii. Any Punitive or Exemplary Damages Exclusion
- iii. Known injury or Damage Exclusion form CG 00 59
- iv. Any Common Policy Conditions form
- v. Any other endorsement/form not specifically authorized in item no. i above.
- vi. An endorsement that limits or excludes Professional Liability coverage
- vii. A Non-Cumulation of Liability or Pyramiding of Limits Endorsements
- viii. An Endorsement that excludes TRIA coverage
- ix. A sole Agent Endorsement
- x. Any type of deductible endorsement or amendment

14.2 If any part of the work is sublet, similar insurance, and evidence thereof as specified in 14.1 above, shall be provided by or on behalf of the subcontractor to cover its operations on Railroad's right of way.

14.3 Prior to entry on Railroad right-of-way, the original Railroad Protective Liability Insurance Policy shall be submitted by the Prime Contractor to the Department at the address below for its review and transmittal to the Railroad. In addition, certificates of insurance evidencing the Prime Contractor's and any subcontractors' Commercial General Liability Insurance shall be issued to the Railroad and the Department at the addresses below and forwarded to the Department for its review and transmittal to the Railroad. The certificates of insurance shall state that the insurance coverage will not be suspended, voided, canceled, or reduced in coverage or limits without (30) days advance written notice to Railroad and the Department. No work will be permitted by Railroad on its right-of-way until it has reviewed and approved the evidence of insurance required herein.

Railroad
Risk Management
Norfolk Southern Railway Company
Three Commercial Place
Norfolk, VA 23510-2191
NSRISK3@NSCORP.COM

Commission
Mr. Dave Ahlvers
State Construction and Materials Engineer
MoDOT
P.O. Box 270
Jefferson City, MO 65102

14.4 The insurance required herein shall in no way serve to limit the liability of Department or its Contractors under the terms of this agreement.

14.5 Insurance Submission Procedures

14.5.1 Norfolk Southern will only accept initial insurance submissions via email to NSRISK3@NSCORP.COM. Norfolk Southern will NOT accept initial insurance submissions via hard copies that would be send either US Mail or Overnight carrier or faxes as only electronic versions are to be submitted to Railroad. Please provide point of contact information with the submission including a phone number and email address.

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14.5.2 Norfolk Southern requires the following two (2) forms of insurance in the initial electronic insurance submission to NSRISK3@NSCORP.COM be submitted under a cover letter providing details of the project and containing the contact information:

a. The full original or certified true electronic countersigned copy of the railroad protective liability insurance policy in its entirety inclusive of all declarations, schedule of forms and endorsements along with the policy forms and endorsements.

b. The contractor's commercial general, automobile, and workers' compensation liability insurance certificate of liability insurance evidencing a combined single limit of a minimum of \$2M per occurrence of general and \$1M per occurrence of automobile liability insurance naming Norfolk Southern Corporation and its subsidiaries, Three Commercial Place, Norfolk, VA 23510 as the certificate holder and as an additional insured on both the general and automobile liability insurance policy.

14.5.3 Norfolk Southern does not accept notation of Railroad Protective insurance on a certificate of liability insurance form or Binders as Norfolk Southern must have the full original or certified true electronic countersigned policy. Norfolk Southern understands that this can typically take a minimum of 30-45 days to receive for review. Please also note that mere receipt is not the only issue but review for compliance, which Norfolk Southern has 10 business days from receipt to respond.

15.0 Failure to Comply:

15.1 In the event the Contractor violates or fails to comply with any of the requirements of these Special Provisions:

15.1.1 The Railroad Engineer may require that the Contractor vacate Railroad property.

15.1.2 The Engineer may withhold all monies due the Contractor on monthly statements.

15.2 Any such orders shall remain in effect until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

16.0 Payment for Cost of Compliance:

16.1 No separate payment will be made for any extra cost incurred on account of compliance with these special provisions. All such costs shall be included in prices bid for other items of the work as specified in the payment items.

17.0 Project Information:

Date: 07/27/2021

NS File No.: _____

NS Milepost: **Midwest Division DOT# 480359B at MP S-5.73**

Department's Project No.: J6S3429B